

## Anticipated acquisition by Thermo Fisher Scientific Inc. of Olink Holding AB

# Decision on relevant merger situation and substantial lessening of competition

#### ME/7087/24

The Competition and Markets Authority's decision on relevant merger situation and substantial lessening of competition under section 33(1) of the Enterprise Act 2002 given on 8 July 2024. Full text of the decision published on 30 July 2024.

The Competition and Markets Authority (**CMA**) has excluded from this published version of the decision information which the CMA considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [ $\gg$ ]. Some numbers have been replaced by a range, which are shown in square brackets.

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## SUMMARY

## **OVERVIEW OF THE CMA'S DECISION**

- 1. The Competition and Markets Authority (**CMA**) has found that the acquisition by Thermo Fisher Scientific Inc. (**TMO**) of Olink Holding AB (**Olink**) is a relevant merger situation that does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**).
- TMO has agreed to acquire Olink by way of a purchase agreement for circa US\$3.1bn. The CMA refers to this acquisition as the Merger. TMO and Olink are together referred to as the Parties and, for statements relating to the future, the Merged Entity.

#### Who are the businesses and what products/services do they provide?

- 3. TMO is a US-based global life sciences company which manufactures and supplies a broad range of analytical, research, and bioprocessing products and services. Olink is a supplier of next generation proteomics products and services based in Sweden.
- 4. Both Parties are active in the global supply of technologies that can be used in proteomics discovery and analysis. Proteomics is the study of the interactions, function, composition, and structures of proteins and their potential use for biomedical and clinical applications (e.g. the study of cancers or Alzheimer's disease). Proteomics studies aim to achieve advancements in health research, drug development and diagnostics.
- 5. Within the proteomics field:
  - (a) TMO supplies high-resolution accurate mass spectrometry (**HRAM**) instruments in the UK and globally; and
  - (b) Olink supplies protein assays capable of analysing over 100 proteins from a single sample (**high-plex assays**) in the UK and globally.

#### Why did the CMA review this merger?

- 6. The CMA's primary duty is to seek to promote competition for the benefit of consumers. It has a duty to investigate mergers that could raise competition concerns in the UK, provided it has jurisdiction to do so. In this case, the CMA has concluded that the CMA has jurisdiction to review the Merger because:
  - (a) a relevant merger situation has been created as each of TMO and Olink are enterprises that will cease to be distinct as a result of the Merger; and

(b) the share of supply test is met as the Parties have a combined share of supply in excess of 25% in relation to the supply of technologies in the UK that can be used in proteomics discovery and analysis capable of detecting a large number of proteins (over 100) from a single sample.

#### What evidence has the CMA looked at?

- 7. In assessing this Merger, the CMA considered a wide range of evidence in the round.
- 8. The CMA received several submissions and responses to information requests from the Parties. The CMA gathered information about their shares of supply, revenue data and their commercial relationships with other companies in the proteomics field.
- 9. The CMA also examined the Parties' internal documents, which show how they run their business and their plans for the future, who their customers are and who they consider their rivals to be. These internal documents were also helpful in understanding the technologies used for proteomics, how the proteomics field is evolving and how the Parties are innovating and developing their technologies.
- 10. The CMA also spoke to and gathered evidence from the Parties' rivals and customers to better understand the competitive landscape, the relevant market and products, and the impact of the Merger.

## What did the evidence tell the CMA about the effects on competition of the Merger?

- 11. The CMA looked at whether the Merger would lead to a substantial lessening of competition in the global supply of technologies used in discovery and translational proteomics research as a result of a loss of competition between the Parties in the supply of these technologies.
- 12. In its assessment, the CMA looked at shares of supply, closeness of competition between the Parties and the remaining competitive constraints faced by the Parties.
- 13. The CMA found that the global supply of technologies used in discovery and translational proteomics research is dynamic with a variety of different players, including established competitors, emerging players, and new technologies.
- 14. The CMA found that there is currently limited overlap between the Parties' technologies and that their products are largely complementary. Although there are some use cases where in principle the two technologies can be used, there are key differences between them. For example, scientists use HRAM instruments

predominantly to conduct 'untargeted' analysis of proteins in tissue samples, while high-plex assays are typically used for 'targeted' analysis of proteins in blood plasma samples.

- 15. The CMA also found that, although the Parties are developing their technologies in ways that will bring them closer together, key differences will remain. For example, HRAM instruments can discover all proteins, and in any form, while high-plex assays can only discover and analyse a limited number of pre-set proteins.
- 16. The Parties' internal documents also suggest that they are not currently innovating or developing their products in response to each other. Rather, TMO is innovating primarily in response to other HRAM instrument suppliers and Olink is innovating primarily in response to other high-plex assay suppliers.
- 17. The CMA also looked at whether the Merger would lead to a substantial lessening of competition through the foreclosure of the Merged Entity's rivals:
  - (a) as a result of the Merged Entity bundling sales of high-plex assays and HRAM instruments; and/or
  - (b) as a result of the Merged Entity refusing to supply, increasing the price or worsening the quality of consumables and component inputs to its rivals.
- 18. In relation to potential bundling, the CMA found that HRAM instruments and highplex assays generally have different use cases, different customers and different procurement processes. The CMA therefore found that the Merged Entity would lack the ability to foreclose rival suppliers by linking sales of the two products.
- 19. In relation to the supply of consumables and component inputs, the CMA found that there are alternative suppliers of the relevant inputs and that TMO's upstream supplies are unlikely to play an important role in shaping competition downstream. The CMA therefore found that the Merged Entity would lack the ability to foreclose its downstream rivals by refusing access to its consumables and/or components, or by worsening the terms on which they are supplied.
- 20. The CMA therefore concluded that the Merger does not give rise to a realistic prospect of an SLC.

#### What happens next?

21. The Merger will therefore **not be referred** under section 33(1) of the Enterprise Act 2002 (the **Act**).

## ASSESSMENT

## 1. PARTIES, MERGER AND MERGER RATIONALE

- 22. Thermo Fisher Scientific Inc. (**TMO**) is a US-based global life sciences company which manufactures and supplies a broad range of analytical, research, and bioprocessing products and services. Within the proteomics field, TMO supplies high-resolution accurate mass spectrometry (**HRAM**, often referred to as **mass spectrometry** or **mass spec**) instruments in the UK and globally.
- 23. TMO's turnover in its last financial year (2022) was £37.3bn worldwide and  $\pounds[>]$  in the UK.
- 24. Olink Holding AB (**Olink**) is a supplier of next generation proteomics products and services based in Sweden. Its products include protein assays capable of analysing over 100 proteins from a single sample (**high-plex assays**). Its ultimate parent company is Summa Equity AB.
- 25. Olink's turnover in its last financial year (2023) was £132.8m worldwide and £[≫] in the UK.
- 26. The proposed transaction (the **Merger**) refers to the purchase by TMO of Olink by way of a purchase agreement dated 17 October 2023 for circa US\$3.1bn. TMO and Olink are together referred to as the **Parties** and, for statements relating to the future, the **Merged Entity**.
- 27. The Merger was also subject to review by competition authorities in Germany, Iceland and the United States.<sup>1</sup>
- 28. The Parties submitted that the strategic rationale for the Merger is as follows:
  - (a) For Olink: to reach customers more rapidly and comprehensively with TMO's global resources and infrastructure;<sup>2</sup>
  - (b) For TMO:
    - (i) to increase innovation and expand unit sales of Olink's products as well as TMO's HRAM instruments,<sup>3</sup>
    - (ii) to use the Parties' complementary offerings to achieve revenue synergies,<sup>4</sup> and

<sup>&</sup>lt;sup>1</sup> Final Merger Notice submitted on 9 May 2024 (**FMN**), paragraph 110 and 111.

<sup>&</sup>lt;sup>2</sup> FMN, paragraphs 7 and 8.

<sup>&</sup>lt;sup>3</sup> FMN, paragraph 65.

<sup>&</sup>lt;sup>4</sup> FMN, paragraph 103.

- (iii) to enhance TMO's capabilities as a leader in proteomics and complement its offering.<sup>5</sup>
- 29. TMO's internal documents generated around the time of the Merger negotiations support its strategic rationale as set out above.

## 2. PROCEDURE

- 30. The CMA's mergers intelligence function identified the Merger as warranting an investigation.<sup>6</sup>
- 31. The CMA commenced its phase 1 investigation on 10 May 2024. As part of its phase 1 investigation, the CMA gathered a significant volume of evidence from the Parties. The CMA received more than 17,000 internal documents from TMO and Olink, including business plans, strategy documents, investment reports and internal presentations on product development and innovation. The Parties also had opportunities to make submissions and comment on our emerging thinking throughout the phase 1 investigation. For example, on 17 June 2024 the CMA invited the Parties to attend an Issues Meeting and the Parties submitted their views in writing. The CMA also gathered evidence from other market participants, such as customers and competitors. Where necessary, this evidence has been referred to within this Decision.
- 32. The Merger was considered at a Case Review Meeting.<sup>7</sup>

## 3. JURISDICTION

- 33. Each of TMO and Olink is an enterprise. As a result of the Merger, these enterprises will cease to be distinct.
- 34. The share of supply test is met where a merger results in a combined share of supply or acquisition of goods or services of any description of 25% or more in the UK or a substantial part of it. In this regard, the Parties overlap in the supply of technologies in the UK that can be used in proteomics discovery and analysis capable of detecting a large number of proteins (more than 100) from a single sample. The Parties had a combined share in the supply of these technologies of [50-60]% (and an increment of [20-30]%) by value in the UK in 2023. The CMA therefore considers that the share of supply test in section 23 of the Act is met.

<sup>6</sup> Mergers: Guidance on the CMA's jurisdiction and procedure (CMA2), January 2021 (as amended on 4 January 2022), paragraphs 6.4–6.6.

<sup>&</sup>lt;sup>5</sup> FMN, paragraph 242.

<sup>&</sup>lt;sup>7</sup> CMA2, from page 65.

- 35. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
- 36. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 10 May 2024 and the statutory 40 working day deadline for a decision is therefore 8 July 2024.

## 4. COUNTERFACTUAL

- 37. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual).<sup>8</sup>
- 38. In an anticipated merger, the counterfactual may consist of the prevailing conditions of competition, or conditions of competition that involve stronger or weaker competition between the parties to a merger than under the prevailing conditions of competition.<sup>9</sup> In determining the appropriate counterfactual, the CMA will generally focus on potential changes to the prevailing conditions of competition only where there are reasons to believe that those changes would make a material difference to its competitive assessment.<sup>10</sup>
- 39. The CMA's conclusion on the counterfactual does not seek to ossify the market at a particular point in time.<sup>11</sup> For example, an assessment based on the prevailing conditions of competition might reflect that, absent the merger under review, a merger firm would have continued making investments in improvements, innovations or new products.<sup>12</sup>
- 40. In this case, the CMA has not received submissions (or other evidence) suggesting that the Merger should be assessed against an alternative counterfactual. Therefore, the CMA believes the prevailing conditions of competition to be the relevant counterfactual.
- 41. In assessing whether the Merger may lead to competition concerns, the CMA has taken account of ongoing investments, innovations and product development by the Parties and their rivals.

<sup>&</sup>lt;sup>8</sup> Merger Assessment Guidelines (CMA129), March 2021, paragraph 3.1.

<sup>&</sup>lt;sup>9</sup> CMA129, paragraph 3.2.

<sup>&</sup>lt;sup>10</sup> CMA129, paragraph 3.9.

<sup>&</sup>lt;sup>11</sup> CMA129, paragraph 3.3.

<sup>&</sup>lt;sup>12</sup> CMA129, paragraph 3.3.

## 5. BACKGROUND

#### 5.1 Market overview

- 42. The Parties are both active in the supply of technologies that can be used in proteomics discovery and analysis.<sup>13</sup> Proteomics is the study of the interactions, function, composition, and structures of proteins and their potential usage for biomedical research and clinical applications.<sup>14</sup> Proteomics studies aim to achieve advancements in health research, drug development and diagnostics.
- 43. TMO supplies HRAM (or high-resolution accurate mass spectrometry) instruments, which measure the mass of particles present in a sample. They are typically used in laboratories dedicated to mass spectrometry analysis (often referred to as 'core' mass spectrometry laboratories) by experienced Ph.D. scientists trained to use HRAM instruments.<sup>15</sup> HRAM instruments are used to examine tissue and fluid samples, although it is challenging to use HRAM instruments to examine blood plasma samples at scale.<sup>16</sup> HRAM instruments can be used in a range of different fields in addition to proteomics, including forensic toxicology, metabolomics (ie, the study and analysis of metabolites) and lipidomics (ie, the study and analysis of cellular lipids).<sup>17</sup> TMO submitted that a high proportion of its revenue from HRAM instruments is derived from non-proteomic applications (eg, toxicology and food safety).<sup>18</sup>
- 44. Within proteomics, HRAM instruments are used to detect and analyse peptides, proteins and their variations, or proteoforms, such as post-translational modifications. HRAM instruments allow for a 'hypothesis-free' investigation of up to 20,000 protein targets and potentially over 1 million proteoforms.<sup>19</sup> They enable scientists to study human health and diseases such as cancers or Alzheimer's disease, using a range of samples including tissue and blood plasma.<sup>20</sup>
- 45. Olink supplies high-plex assays, a technology that detects proteins by coupling an affinity reagent (eg, antibodies) to a reporter system for detection.<sup>21</sup> High-plex

<sup>&</sup>lt;sup>13</sup> Proteomics forms part of the 'multi-omics' discipline, which also includes a number of other -omics disciplines, such as genomics, transcriptomics, lipidomics, glycomics, and metabolomics. Parties' response to the CMA's request for information of 13 March 2024 (**RFI3**), question 6.

<sup>&</sup>lt;sup>14</sup> FMN, paragraph 2.

<sup>&</sup>lt;sup>15</sup> FMN, paragraph 5 and Parties' white paper on horizontal and conglomerate theories of harm (**white paper**), 19 April 2024, paragraph 7.4.

<sup>&</sup>lt;sup>16</sup> FMN, paragraphs 38 and 39. This is due to the samples' "dynamic range". In samples such as plasma with a higher dynamic range, signals from high-abundant proteins (often albumin), which comprise the bulk of the sample, obscure the low-abundance proteins that are usually the subject of the analysis.

<sup>&</sup>lt;sup>17</sup> Mass Spectrometry Applications Areas | Thermo Fisher Scientific - UK

<sup>&</sup>lt;sup>18</sup> Parties' response to the CMA's request for information of 26 January 2024 (**RFI1**), paragraph 14.7.

<sup>&</sup>lt;sup>19</sup> 'Post-translational modifications' or PTMs refer to variations in a protein's structure that can modify and regulate its activity, localisation, and interaction with other molecules. FMN, paragraph 232(a), as well as, for example, Overview of Post-Translational Modification | Thermo Fisher Scientific - UK.

<sup>&</sup>lt;sup>20</sup> Parties' white paper, 19 April 2024, paragraphs 5.8–5.10.

<sup>&</sup>lt;sup>21</sup> FMN, paragraphs 147–148.

assays are also referred to as '**affinity-based arrays**', '**high-plex arrays**' or '**protein arrays**'.

- 46. High-plex assays are part of the 'next-generation' of proteomics, a term that refers to new solutions used for screening the presence or absence of hundreds or thousands of proteins in a sample.<sup>22</sup>
- 47. 'Plex' refers to the number of proteins within a sample that can be analysed at once. Typically, assays that can analyse more than around 100 proteins per sample are considered 'high-plex'.<sup>23</sup> High-plex assays are used in the study of complex diseases such as cancers, and large cohorts of samples, such as those required by population studies.<sup>24</sup>
- 48. At present, there are six suppliers of HRAM instruments: TMO, Bruker Corporation (Bruker), Sciex LLC (Sciex),<sup>25</sup> Waters Corporation (Waters), Agilent Technologies, Inc. (Agilent) and Shimadzu Scientific Instruments (Shimadzu). In addition, Seer Inc. (Seer) is a provider of HRAM sample preparation solutions. These solutions make it easier for HRAM instruments to analyse blood plasma samples.<sup>26</sup>
- 49. Currently, there are two suppliers of high-plex assays: Olink and SomaLogic, Inc.
  (SomaLogic).<sup>27</sup> In addition, Alamar Biosciences Inc. (Alamar) recently announced its entry into high-plex assays.<sup>28</sup>
- 50. Proteomics customers comprise a variety of research institutes, academic institutions and hospitals, as well as pharmaceutical, biotechnology, clinical and diagnostic laboratories.<sup>29</sup>
- 51. Proteomics technologies and consumables are usually purchased following individual negotiations. While some customers follow public procurement procedures and issue formal tenders when multiple suppliers meet their needs (ie, UK public authorities and research institutes), these customers will bilaterally negotiate a contract if only one supplier meets their specific requirements.<sup>30</sup>

<sup>&</sup>lt;sup>22</sup> FMN, Annex 14.3, slide 2.

<sup>&</sup>lt;sup>23</sup> FMN, paragraph 150.

<sup>&</sup>lt;sup>24</sup> Parties' response to RFI1, 26 January 2024, paragraph 4.4.

<sup>&</sup>lt;sup>25</sup> Sciex is owned by Danaher Corporation (**Danaher**). References to Danaher in internal documents and by third parties are described as references to Sciex in this Decision.

<sup>&</sup>lt;sup>26</sup> Parties' response to the CMA's request for information of 23 February 2024 (**RFI2**), paragraph 13.4. They do this by removing high abundant proteins from the sample.

<sup>&</sup>lt;sup>27</sup> On 5 January 2024, Standard BioTools Inc. announced its acquisition of SomaLogic. See Standard BioTools Completes Merger with SomaLogic, Creating a Diversified and Scaled Leader in Life Sciences Tools | Standard BioTools Inc.

<sup>&</sup>lt;sup>28</sup> FMN, paragraph 284. Also see: Proteomics Startup News: Alamar Biosciences Inc., Fremont, CA

<sup>&</sup>lt;sup>29</sup> CMA analysis and Parties' response to RFI1, 26 January 2024, question 16.

<sup>&</sup>lt;sup>30</sup> Note of a call with a third party, March 2024.

52. Choice between proteomics technologies is often led by scientists and researchers based on their requirements and the scope of their activities, rather than centrally led by customers' procurement departments.<sup>31</sup>

#### 5.2 Competitive dynamics

- 53. The Parties submitted that suppliers of HRAM instruments, such as TMO, do not compete with suppliers of high-plex assays, such as Olink. They submitted that their technologies overwhelmingly serve distinct purposes on different instruments in different end-user contexts typically involving different types of scientists with distinct "use cases" in mind and, in the vast majority of cases, using different sample types.<sup>32</sup> We consider this submission in the competitive assessment section below.
- 54. Based on the Parties' submissions and other evidence gathered during its investigation, the CMA considers that competition between suppliers of proteomics technologies occurs primarily over product quality and features across the following parameters:
  - (a) **coverage or plex**: the number of proteins and their variations that an instrument can detect from a single sample;
  - (b) **dynamic range**: the ability to simultaneously detect low- and high-abundant proteins in the same sample;
  - (c) **ease of use**: what qualifications and experience are required to operate an instrument;
  - (d) **sample type**: the type of sample (eg, tissue, blood plasma or sera) that an instrument can analyse;
  - (e) **sensitivity**: the ability to detect proteins in the lowest concentrations; and
  - (f) **throughput or speed:** the rate at which an instrument can test multiple samples.
- 55. Several customers indicated that cost (of both the instrument and associated consumables and services) is a secondary factor when selecting a particular proteomics technology.<sup>33</sup> Customers stated that choice of technology is driven instead by specific research needs, including those set out above. Customers

<sup>&</sup>lt;sup>31</sup> Note of a call with a third party, March 2024. Note of a call with a third party, March 2024. Note of a call with a third party, April 2024. Note of a call with a third party, March 2024.

<sup>&</sup>lt;sup>32</sup> FMN, paragraph 6.

<sup>&</sup>lt;sup>33</sup> Note of a call with a third party, March 2024. Note of a call with a third party, March 2024. Note of a call with a third party, April 2024. Note of a call with a third party, March 2024.

explained that price becomes a more important consideration during the procurement process, after a technology has been selected.<sup>34</sup>

- 56. Other secondary parameters that the Parties submitted customers may take into account for both HRAM instruments and high-plex assays include specificity,<sup>35</sup> the levels of sophistication, functionality and automation, the variety and breadth of panels offered, performance for the intended application, instrument footprint, software and reliability.<sup>36</sup>
- 57. The majority of the Parties' customers that responded to the CMA's investigation said that plex, dynamic range, sample type, sensitivity and throughput are very important factors when choosing a supplier of HRAM instruments or high-plex assays.<sup>37</sup>
- 58. As such, the CMA considers that competition between suppliers of proteomics technologies occurs primarily over product quality and features across the parameters set out above. Once customers select a proteomics technology (eg HRAM instrument, high plex assay), suppliers of that technology also compete on price. The Parties' internal documents indicate that innovation and product development is a key aspect of competition in this field, as discussed in more detail below.

### 6. MARKET DEFINITION

- 59. Market definition provides a framework for assessing the competitive effects of a merger. The assessment of the relevant market(s) is an analytical tool that forms part of the analysis of the competitive effects of the merger and should not be viewed as a separate exercise.<sup>38</sup>
- 60. While market definition can sometimes be a useful tool, the outcome of any market definition exercise does not determine the outcome of the CMA's analysis of the competitive effects of the merger in any mechanistic way.<sup>39</sup> The CMA recognises that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. In many cases, especially those involving differentiated products, there is often no 'bright line' that can or should be drawn. Rather, it can be more helpful to describe the constraint posed by different categories of product or supplier as sitting on a continuum between 'strong' and 'weak'. In most mergers, the evidence gathered as part of the competitive

<sup>&</sup>lt;sup>34</sup> Note of a call with a third party, March 2024. Note of a call with a third party, April 2024.

<sup>&</sup>lt;sup>35</sup> This refers to how accurately a platform measures what it claims to measure.

<sup>&</sup>lt;sup>36</sup> Parties' response to RFI1, 26 January 2024, questions 14 and 15.

<sup>&</sup>lt;sup>37</sup> Third-party responses to the CMA customers questionnaires, May 2024.

<sup>&</sup>lt;sup>38</sup> CMA129, paragraph 9.1.

<sup>&</sup>lt;sup>39</sup> CMA129, paragraph 9.4.

assessment, which will assess the potentially significant constraints on the merger firms' behaviour, captures the competitive dynamics more fully than formal market definition.<sup>40</sup>

#### 6.1 Product market

- 61. The Parties submitted that TMO and Olink are loosely active in 'proteomics' or 'biomarker discovery', but their technologies serve distinct purposes in different end user contexts or 'use cases'.<sup>41</sup> They submitted that HRAM instruments and high-plex assays belong to separate product markets.<sup>42</sup> They stated that Olink specialises in providing targeted protein assay solutions, particularly high-plex assays using high-throughput next generation sequencing (**NGS**) read out technology,<sup>43</sup> a space where TMO is not active. They stated that TMO's activities are focused on the supply of HRAM instruments.<sup>44</sup>
- 62. Product market definition starts with the relevant products of the merger firms in this case the supply of high-plex assays and HRAM instruments. In identifying what other significant competitive alternatives should be included in the relevant market, the CMA will pay particular regard to demand-side factors (the behaviour of consumers).<sup>45</sup>
- 63. On the demand-side, as set out in detail in the competitive assessment below, the evidence is as follows:
  - (a) The Parties' internal documents indicate a degree of overlap between the two technologies across a range of use cases in basic research and discovery, and in translational research.<sup>46</sup>
  - (b) Third-party evidence also indicates that the Parties overlap in this area, albeit to a limited extent. Half of the customers that responded to the CMA's investigation considered that HRAM instruments and high-plex assays are adequate alternatives to each other for some use cases.<sup>47</sup> All but one competitor also considered that the Parties' technologies overlap for some

<sup>&</sup>lt;sup>40</sup> CMA129, paragraph 9.2.

<sup>&</sup>lt;sup>41</sup> FMN, paragraph 139.

<sup>&</sup>lt;sup>42</sup> FMN, paragraph 19.

<sup>&</sup>lt;sup>43</sup> High-throughput NGS read out systems are platforms commercialised by third parties that are used to determine the sequence of genetic material, and on which Olink's high-plex assays run. FMN, paragraph 198.

<sup>&</sup>lt;sup>44</sup> FMN, paragraph 146. The Parties also submitted that they overlap in the supply of mid-plex assays. The CMA found that the Parties are small suppliers of mid-plex assays, with combined shares of supply of [10-20]% in this segment globally in 2022, and that the Parties will continue to face strong competitive constraints from a range of larger suppliers in this segment. Accordingly, the CMA has not considered the overlap in mid-plex assays within this Decision. To the extent that mid-plex assay suppliers and other proteomics technologies exert competitive constraints on the Parties' technologies used in discovery and translational research (including HRAM and high-plex assays), the CMA has taken this into consideration in its competitive assessment.

<sup>&</sup>lt;sup>45</sup> CMA129, paragraphs 9.6 and 9.7.

<sup>&</sup>lt;sup>46</sup> For example, TMO's internal document, TFS\_00006417, 19 December 2023, slide 8.

<sup>&</sup>lt;sup>47</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 5 and 9.

use cases,<sup>48</sup> notably for human blood plasma samples,<sup>49</sup> and more broadly for discovery and translational research.<sup>50</sup>

- (c) In response to the CMA's investigation, all competitors and two customers indicated that the overlap between HRAM instruments and high-plex assays is likely to increase in the future.<sup>51</sup>
- (d) Evidence from the Parties' internal documents also show that both Parties have developed and are continuing to develop their respective product offerings.<sup>52</sup> These improvements have, to some extent, narrowed some of the differences highlighted by the Parties between their respective technologies.
- 64. Taking into account the differentiated nature of the technologies involved and given the extent of ongoing product development and innovation, the CMA considers that there is no bright line that can or should be drawn between the Parties' technologies.<sup>53</sup> Given the evidence above (set out in more detail in the competitive assessment below), the CMA has assessed the impact of the Merger in the supply of technologies used in discovery and translational proteomics research, including HRAM instruments and high-plex assays. However, it has not been necessary for the CMA to reach a conclusion on the relevant product market since the Merger does not give rise to a realistic prospect of an SLC on any plausible basis.

#### 6.2 Geographic market

- 65. The Parties submitted that the geographic market for the provision of high-plex assays is global.<sup>54</sup> The Parties submitted that high-plex assay suppliers typically offer products with little to no differentiation from centralised testing facilities regardless of customer location. Further, the Parties submitted that there is a standard price for high-plex assays globally, and discounts are geared towards high-volume orders.<sup>55</sup>
- 66. The Parties noted that the European Commission has previously considered the markets for mass spectrometry instruments to be at least EEA-wide, but submitted

<sup>&</sup>lt;sup>48</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4.

<sup>&</sup>lt;sup>49</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4.

<sup>&</sup>lt;sup>50</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 5.

<sup>&</sup>lt;sup>51</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 11. Note of call with a third party, March 2024. Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>52</sup> For example, see TMO's internal documents, 19. 2023\_LSMS\_CLT Review\_FINAL, 12 April 2023, slides 39, 40 and 43 and TFS\_00001641, 1 November 2021, slide 2. Olink's internal documents, 30. 15 August 2022 - Olink Holding AB (publ) Board of Directors Meeting 15 August 2022, 15 August 2022, slide 95 and 133; OMEGA00010812, 2 June 2022 and 30. 15 August 2022 - Olink Holding AB (publ) Board of Directors Meeting 15 August 2022, slide 133.

<sup>&</sup>lt;sup>53</sup> CMA129, paragraph 9.4.

<sup>&</sup>lt;sup>54</sup> FMN, paragraph 163.

<sup>&</sup>lt;sup>55</sup> FMN, paragraph 164.

that the precise definition could be left open because competition concerns do not arise on any plausible basis.<sup>56</sup>

- 67. The CMA found that all suppliers of technologies used in discovery and translational proteomics research are active on a worldwide basis.<sup>57</sup> For high-plex assays, the CMA found that suppliers such as Olink offer customers the option of shipping their samples to a few international locations (in the case of Olink, Sweden and the US).<sup>58</sup> The CMA has found that key competitive parameters such as innovation, product quality, and pricing strategies are decided on a global basis and are, thus, primarily influenced by global competitive conditions.<sup>59</sup>
- 68. The CMA has considered whether China should be excluded from the geographic market on the basis that the regulatory landscape in China differs to that of other jurisdictions.<sup>60</sup> However, the CMA does not consider that its competitive assessment would be affected by including or excluding China from the relevant geographic market.
- 69. Accordingly, the CMA has assessed the impact of the Merger globally. However, it has not been necessary to reach a conclusion on the geographic market, as the Merger does not give rise to a realistic prospect of an SLC on any plausible basis.

## 7. COMPETITIVE ASSESSMENT

- 70. The CMA assesses the potential competitive effects of mergers by reference to theories of harm. Theories of harm provide a framework for assessing the effects of a merger and whether or not it could lead to an SLC relative to the counterfactual.<sup>61</sup>
- 71. In its investigation of this Merger, the CMA has considered the following theories of harm:
  - Horizontal unilateral effects in the supply of technologies (including HRAM instruments and high-plex assays) used in discovery and translational proteomics research globally;
  - (b) Non-horizontal conglomerate effects through the bundling of HRAM instruments and high-plex assays; and

<sup>&</sup>lt;sup>56</sup> FMN, paragraph 172.

<sup>&</sup>lt;sup>57</sup> FMN, paragraphs 82, 83 and 238. Offices and Authorized Sites: Europe, Middle East and Africa - SomaLogic.

<sup>&</sup>lt;sup>58</sup> See Olink's FAQs, How should samples be shipped to Olink Proteomics.

<sup>&</sup>lt;sup>59</sup> For example, TMO's internal document, 19. 2023\_LSMS\_CLT Review, 12 April 2023.

<sup>&</sup>lt;sup>60</sup> FMN, paragraph 164(b).

<sup>&</sup>lt;sup>61</sup> CMA129, paragraph 2.11.

- (c) Non-horizontal vertical effects through the total or partial foreclosure of rival suppliers of high-plex assays and NGS read out technology using TMO's consumables and components.
- 72. Each of these theories of harm is considered below.

## 7.1 Horizontal unilateral effects in the supply of technologies used in discovery and translational proteomics research

- 73. Unilateral effects can arise in a horizontal merger when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged entity profitably to raise prices or degrade non-price aspects of its competitive offering (such as quality, range, service and innovation) on its own and without needing to coordinate with its rivals.<sup>62</sup> The CMA generally takes a forward-looking approach to its assessment of theories of harm, considering the effects of a merger both now, and in the future.<sup>63</sup> In some sectors, an important aspect of how firms compete involves efforts or investments aimed at protecting or expanding profits in the future. This includes efforts that may give firms the ability to compete in entirely new areas (ie to enter), or the ability to compete more effectively in areas where they are already active (ie to expand).<sup>64</sup>
- 74. In its investigation of this Merger, the CMA has considered whether the Merger has resulted, or may be expected to result, in an SLC in relation to horizontal unilateral effects in the supply of technologies used in discovery and translational proteomics research globally.
- 75. As set out above, competition between proteomics technology suppliers, including suppliers of HRAM instruments and high-plex assays, primarily occurs over product quality and features. The CMA's investigation has therefore particularly focused on assessing whether the Merger could lessen the Parties' incentives to compete, particularly with respect to product development and innovation (which could improve product quality and features), leading to a worse outcome for consumers now and/or in the future.
- 76. In its assessment, the CMA has assessed shares of supply, closeness of competition between the Parties, and the remaining competitive constraints faced by the Parties using the following sources of evidence:
  - (a) the Parties' submissions (including revenue data);
  - (b) the Parties' internal documents; and

<sup>&</sup>lt;sup>62</sup> CMA129, paragraph 4.1.

<sup>&</sup>lt;sup>63</sup> CMA129, paragraph 2.14.

<sup>&</sup>lt;sup>64</sup> CMA129, paragprah 5.17.

(c) third-party evidence.

#### 7.2 Shares of supply

- 77. Shares of supply can be useful evidence when assessing closeness of competition, particularly when there is persuasive evidence as to which potential substitutes should be included or excluded or when the degree of differentiation between firms is more limited. In such circumstances, a firm with a higher share of supply is more likely to be a close competitor to its rivals.<sup>65</sup>
- 78. In other cases, such as where the boundaries of the market are not as clear-cut or where there is a high degree of differentiation, the CMA may rely to a greater extent on other sources of evidence. Where products are more differentiated or customer preferences are more diverse, shares of supply may not provide evidence on the closest alternatives available to the merger firms' customers as these may be different from the products that achieve the greatest sales across a wider body of customers.<sup>66</sup>
- 79. The CMA has estimated shares of supply based on the Parties' and third-party revenue data in Table 1 below. The CMA is not aware of any independent estimates of the total global market size for technologies used in discovery and translational proteomics research and has, therefore, based its estimate of the total market size on the sum of the sales of the suppliers listed in Table 1 below.

Supplier	Revenue (£m)	Shares
ТМО	£[ <b>%</b> ]	[40-50]%
Olink	£[ <b>%</b> ]	[10-20]%
Combined	£[ <b>×</b> ]	[50-60]%
Bruker	[≫]	[20-30]%
SomaLogic	[×]	[10-20]%
Waters	[×]	[0-5]%
Sciex	[×]	[0-5]%
Total	[×]	100%

Table 1: Shares of supply in the global supply of technologies used in discovery	/ and
translational proteomics research (2023)	

Source: CMA analysis using data received from the Parties and third parties

Notes: (1) Sciex revenues were provided in USD; they were converted to GBP using the Bank of England's annual exchange rates.<sup>67</sup> (2) Excludes data for Agilent and Shimadzu.<sup>68</sup> (3) Excludes Alamar because it was not active in 2023.

<sup>&</sup>lt;sup>65</sup> CMA129, paragraph 4.14.

<sup>&</sup>lt;sup>66</sup> CMA129, paragraph 4.15.

<sup>&</sup>lt;sup>67</sup> USD exchange rates | Bank of England | Database

<sup>&</sup>lt;sup>68</sup> Neither Agilent nor Shimadzu provided revenue data to the CMA. The Parties' submissions indicate that Agilent and Shimadzu are smaller than Sciex and the CMA has considered that their addition would not significantly change the estimated shares in Table 1. FMN, paragraph 11.2.

- 80. Table 1 shows that TMO and Olink are the first and third largest global suppliers of technologies used in discovery and translational proteomics respectively. TMO's share is approximately [40-50]%, and Olink's share is approximately [10-20]%. Combined, the Merged Entity has a share of [50-60]%.
- 81. There are also other competitors that hold material shares. Bruker, which supplies HRAM instruments, is the second largest supplier and accounts for slightly less than a third of global sales across all technologies in 2023. SomaLogic, which is the second largest supplier of high-plex assays, has a [10-20]% global share across all technologies in 2023.
- 82. There is also a tail of competitors with a smaller presence such as Waters, Sciex, Agilent, Shimadzu (which all supply HRAM instruments). Alamar is a new entrant into high-plex assays in 2024 and as such has not been captured in the shares of supply presented in Table 1.
- 83. The Parties are the market leaders in their respective technologies. TMO supplied [50-60]% of HRAM instruments, and Olink supplied [50-60]% of high-plex assays (by revenue) globally in 2023. Bruker ([30-40]%) and SomaLogic ([40-50]%) are the main rivals to the Parties within the HRAM and high-plex segment respectively. Other rivals are significantly smaller.
- 84. As stated above, although the Parties' shares of supply are substantial, shares are less useful indicators of closeness of competition where there is a high degree of differentiation.
- 85. Further, the shares of supply show a historical and static picture of the suppliers' positions in the supply of technologies used in discovery and translational proteomics. While these shares provide some insight into the competitive landscape today, the CMA found that the high-plex assay segment is growing and evolving rapidly, including in comparison to the HRAM segment. For example, the Parties' submissions show that global high-plex assay revenues have grown by 19% between 2022 and 2023,<sup>69</sup> and the Parties submitted that Olink's high-plex assay sales are expected to grow at a rate of approximately 15% annually over the next 10 years,<sup>70</sup> compared to 6-7% growth for HRAM instruments between 2023 and 2028.<sup>71</sup>
- 86. The CMA has assessed the extent to which the Parties may currently be close competitors and the extent to which they could become closer rivals in the future in the sections below.

<sup>&</sup>lt;sup>69</sup> FMN, paragraph 11.7.

<sup>&</sup>lt;sup>70</sup> FMN, paragraph 91.

<sup>&</sup>lt;sup>71</sup> TMO's internal document, TFS\_00019327, 30 June 2023, slide 6.

#### 7.3 Closeness of competition

87. In differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors. The merger firms need not be each other's closest competitors for unilateral effects to arise. It is sufficient that the merger firms compete closely and that the remaining competitive constraints are not sufficient to offset the loss of competition between them resulting from the merger.<sup>72</sup>

#### 7.3.1 Parties' submissions

- 88. The Parties submitted that they do not view each other as close competitors, describing their technologies as complementary.
- 89. The Parties submitted there is limited overlap between HRAM instruments and high-plex assays. In particular, the Parties submitted that:
  - (a) Their technologies are used for different uses cases, in different laboratories, by different scientists.<sup>73</sup>
  - (b) There is only scope for an overlap between the Parties for use cases that employ human blood plasma samples, but this this overlap is hypothetical. It is unlikely that the Parties will become closer competitors in the future as a result of technological convergence.<sup>74</sup>
  - (c) There are price differences between the two technologies, with Olink's highplex assays costing between €[≫]and €[≫] on average, compared to TMO's HRAM instrument costing approximately €[≫].<sup>75</sup> The Parties further submitted that an HRAM instrument is a large one-off capital expenditure, whereas high-plex assays are a smaller pay-as-you-go operating expense.<sup>76</sup>
  - (d) The Parties do not directly compete with each other's technologies, or compete for the same opportunities, as evidenced by the Parties' bidding win/loss analysis, which shows that [≫].<sup>77</sup>

<sup>&</sup>lt;sup>72</sup> CMA129, paragraph 4.8.

<sup>&</sup>lt;sup>73</sup> The Parties submitted that TMO's HRAM instruments tend to be used by specialists in core mass spectrometry laboratories for untargeted, hypothesis free, discovery work on tissue samples. In comparison, Olink's high-plex assays are more commonly used for targeted and hypothesis-driven analysis on human blood plasma samples. FMN, paragraphs 5 and 6.

<sup>&</sup>lt;sup>74</sup> FMN, paragraphs 16 and 18. The Parties also submitted that in any conceivable future, the two technologies will remain 'miles apart'. In particular, they indicated that it would be difficult for TMO's HRAM instruments to achieve high throughput that is comparable to high plex assays, and it would be difficult for high-plex assays to conduct truly untargeted analysis of proteins and post-translational modifications. Parties' response to the Issues Letter, 19 June 2024, paragraphs 4 and 6.

<sup>&</sup>lt;sup>75</sup> FMN, paragraphs 16 and 18.

<sup>&</sup>lt;sup>76</sup> FMN, paragraph 282(d).

<sup>&</sup>lt;sup>77</sup> Parties' response to the Issues Letter, 19 June 2024, paragraph 7.

- (e) The Parties are not innovating in response to each other, and in the Parties' view this is supported by TMO's and Olink's internal documents.<sup>78</sup>
- (f) TMO is not active in, [ $\approx$ ] the high-plex assay segment. Similarly, Olink is not active in, and [ $\approx$ ].<sup>79</sup>

#### 7.3.2 CMA's assessment

#### 7.3.2.1 Internal documents

- 90. The CMA has considered the extent to which the Parties' internal documents suggest that they are close competitors, including whether and the extent to which:
  - (a) there is an overlap between the Parties' technologies;
  - (b) the Parties have developed and/or are developing their technologies in ways that will bring them into closer competition in the future; and
  - (c) the Parties are driving each other's innovation and product development efforts.
- 91. In its assessment of internal documents, the CMA has taken into account when Merger discussions between the Parties were initiated. As a general principle, the CMA believes that internal documents prepared in the ordinary course of business are liable to have higher probative value than internal documents prepared with the Merger already in contemplation, which may understate the competitive dynamics between the Parties.<sup>80</sup>

#### 7.3.2.1.1 Current overlap

- 92. The CMA has considered the extent to which the Parties view each other as capable of serving the same use cases today. The CMA has found that there is currently limited overlap between the Parties' technologies, and that they are often described as complementary.
- 93. The majority of the Parties' internal documents indicate that HRAM instruments and high-plex assays have different strengths and weaknesses across various parameters and describe the two technologies as complementary.<sup>81</sup> For example:

<sup>&</sup>lt;sup>78</sup> The Parties submitted that there is no documentary evidence that high-plex suppliers have acted as a current or emerging driver for TMO's HRAM innovation and R&D. Similarly, there is no evidence in Olink's internal documents of incrementally responding to competitive pressure from TMO with respect to innovation for its high-plex assays. Parties' response to the Issues Letter, 19 June 2024, paragraph 3.

<sup>&</sup>lt;sup>79</sup> FMN, paragraph 10 and 11.

<sup>&</sup>lt;sup>80</sup> CMA129, paragraph 2.29.

<sup>&</sup>lt;sup>81</sup> For example, TMO's internal document TFS\_00001570, 6 July 2023.

- (a) A strategy report commissioned by TMO considers that HRAM instruments and high-plex assays have strengths that complement each other.<sup>82</sup> In another strategy document, TMO indicates that it should embrace Olink technology as complementary to mass spec.<sup>83</sup> Another TMO document describes Olink and SomaLogic as complementary technologies that could strengthen TMO's proteomics offerings.<sup>84</sup>
- (b) Some of Olink's internal documents consider that HRAM instruments are complementary to high-plex assays,<sup>85</sup> and that customers with HRAM labs use Olink for complementary work.<sup>86</sup> Another Olink document indicates that HRAM instruments are being used partly for different use cases, as Olink's high-plex assays are unable to conduct analysis for unbiased research.<sup>87</sup>
- 94. A few of the Parties' internal documents indicate that both technologies can be used for some of the same applications and use cases. For example:
  - (a) Some of TMO's internal documents indicate an overlap between the two technologies within a range of use cases in basic research and discovery, and in translational research. In particular, both technologies are considered to have high utilisation within [≫] and [≫],<sup>88</sup> and both are considered highly applicable for certain use cases such as [≫] and '[≫].<sup>89</sup>
  - (b) Some of Olink's internal documents also show that there is an overlap between the Parties' technologies and that affinity-based methods which include high-plex assays are likely to compete for use cases with HRAM instruments.<sup>90</sup>

#### 7.3.2.1.2 Product development

95. Both Parties have developed and are continuing to develop their respective product offerings (including through partnerships with third parties). These improvements have, to some extent, narrowed some of the differences highlighted by the Parties between their respective technologies. However, the evidence suggests that the Parties' offerings are differentiated and that the prospect of the Parties becoming close competitors in the foreseeable future is limited.

<sup>&</sup>lt;sup>82</sup> TMO's internal document, Annex 2, Parties' response to RFI3, , slide 37, August 2022.

<sup>&</sup>lt;sup>83</sup> TMO's internal document, 35. Q3 2022 NGP Presentation, September 2022, slide 22.

<sup>&</sup>lt;sup>84</sup> TMO's internal document, Proteomics diligence\_Summary of findings\_28Sept21\_vDraft, September 2021, slide 10.

<sup>&</sup>lt;sup>85</sup> Olink's internal documents, OMEGA00001715, slide 25, 11 August 2021 and OMEGA00001527, 29 April 2021.

<sup>&</sup>lt;sup>86</sup> Olink's internal document, OMEGA00001262, 11 February 2021.

<sup>&</sup>lt;sup>87</sup> Olink's internal document, OMEGA00000052, 20 January 2021.

<sup>&</sup>lt;sup>88</sup> TMO's internal document, TFS\_00026596, 2 March 2022, slide 7.

<sup>&</sup>lt;sup>89</sup> For example, TMO's internal document, TFS\_00006417, 19 December 2023, slide 8.

<sup>&</sup>lt;sup>90</sup> For example, Olink's internal documents, OMEGA00001135, 4 January 2020, slides 1–2; OMEGA00005509, slide 6, 6 August 2021; OMEGA00000440, 11 June 2021, slide 42; and OMEGA00000317, 11 August 2021, slide 70.

- 96. The Parties have made significant improvements to their respective product offerings within the last few years, and are also taking advantage of technological developments by third parties. In January 2021, Seer announced a non-exclusive partnership with TMO for rapid and large-scale proteomics aimed particularly at multi-omics researchers and companies.<sup>91</sup> As explained above, Seer has developed a sample preparation technology that enables HRAM instruments to conduct better analysis on blood plasma samples.<sup>92</sup> In June 2023, TMO launched Orbitrap Astral and announced an expanded partnership with Seer to market and develop proteomic workflows.<sup>93</sup> The Parties' internal documents make several references to the way in which these developments have improved TMO's technology:
  - (a) TMO's internal documents indicate that Orbitrap Astral has increased throughput and sensitivity, which enables it to run analysis for larger cohorts in translational proteomics. TMO's strategy plans for Orbitrap Astral include targeting [≫], which had previously not considered mass spectrometry due to concerns regarding [≫].<sup>94</sup>
  - (b) There is some limited internal documentary evidence of TMO considering targeting customers typically served by high-plex assays use cases.<sup>95</sup>
  - (c) TMO's internal documents show that TMO is aware of HRAM's shortcomings in conducting plasma proteomics analysis and considers that its partnership with Seer will address important throughput needs in translational proteomics.<sup>96</sup>
  - (d) Olink's internal documents regularly monitor Seer as a tool to improve analysis of plasma samples.<sup>97</sup>
- 97. In relation to Olink's product development:
  - (a) The coverage of Olink's high-plex assays has increased significantly in recent years, doubling in June 2021 to 3,000 proteins per sample<sup>98</sup> and increasing again in July 2023 to 5,300 proteins per sample.<sup>99</sup>

<sup>94</sup> TMO's internal document, 19. 2023\_LSMS\_CLT Review\_FINAL, 12 April 2023, slides 39, 40 and 43.

<sup>96</sup> TMO's internal document, TFS\_00001641, 1 November 2021, slide 2.

<sup>&</sup>lt;sup>91</sup> Seer Signs Commercial Agreement to Provide Complete End-to-End Solution for Unbiased, Deep, Rapid and Large-Scale Proteomics | Seer, Inc.

<sup>&</sup>lt;sup>92</sup> FMN paragraph 13.3 and 13.4.

<sup>&</sup>lt;sup>93</sup> Seer Collaborates to Make Scalable, Unbiased Proteomics Accessible to More Researchers via new Seer Technology Access Center | Seer, Inc.

<sup>&</sup>lt;sup>95</sup> For example, TMO's internal documents, CMD 2023 STRAP, June 2023, slide 31, 33 and 35; TFS\_00035927, 11 September 2022, slides 24, 33 and 37 and TFS\_00008083, 8 May 2023.

<sup>&</sup>lt;sup>97</sup> For example, Olink's internal documents, OMEGA00000056, 22 January 2021; OMEGA00006178, 3 January 2023; OMEGA00000716, 29 April 2022, slides 2–8, and 10; OMEGA00001608, 23 June 2021, slide 2 and FMN, Annex 12, June 2023, slide 25.

<sup>&</sup>lt;sup>98</sup> Announcing Olink Explore 3072 - Olink.

<sup>&</sup>lt;sup>99</sup> Announcing Olink® Explore HT – A New Era in Proteomics.

- Olink's internal documents indicate that it has considered developments such (b) as [%],<sup>100</sup> [%],<sup>101</sup> and [%].<sup>102</sup>
- In some older internal documents from 2020, Olink considered opportunities (c) to target and 'convert' HRAM customers.<sup>103</sup>
- 98. However, notwithstanding these developments, the Parties' internal documents suggest that there is limited prospect of HRAM instruments and high-plex assays becoming close competitors in the foreseeable future. For example:
  - (a) One Olink internal email notes that while HRAM instruments have improved throughput, it is still far lower than for Olink's products,<sup>104</sup> and another internal email notes that it would take more than 10 years to run 50,000 blood plasma samples with Seer, compared to a couple of weeks to months with Olink's high-plex assays.<sup>105</sup> In the same email chain, Olink notes that, whilst Seer helps HRAM instruments address some of their weaknesses, the lack of consistency, reproducibility, and throughput make HRAM instruments not a credible substitute for Olink's customers.<sup>106</sup>
  - This Olink internal email also suggests that detection of new proteins and (b) protein variation is not a 'meaningful' use of its high-plex assays. This suggests that Olink's challenges in detecting post-translational modifications in blood plasma samples could limit the extent of substitutability between the Parties' technologies.<sup>107</sup>
  - One TMO internal document considers that high-plex assays have strengths (c) that HRAM instruments will struggle to address. It notes high-plex assays have high throughput, sensitivity, and are able to conduct analysis using smaller quantities of blood plasma samples.<sup>108</sup>
  - (d) In response to the Issues Letter, the Parties submitted TMO marketing material showing that, even with the use of Seer, TMO's Orbitrap Astral is only able to process 4 blood plasma samples per day.<sup>109</sup> The CMA

<sup>&</sup>lt;sup>100</sup> Olink's internal document, 30.15 August 2022 - Olink Holding AB (publ) Board of Directors Meeting 15 August 2022, 15 August 2022, slide 95 and 133.

<sup>&</sup>lt;sup>101</sup> Olink's internal document, OMEGA00010812, 2 June 2022.

<sup>&</sup>lt;sup>102</sup> Olink's internal document, 30.15 August 2022 - Olink Holding AB (publ) Board of Directors Meeting 15 August 2022, 15 August 2022, slide 133.

<sup>&</sup>lt;sup>103</sup> For example, Olink's internal documents, OMEGA00001135, April 2021, slides 1 and 4; OMEGA00011019, 2 October 2020, slides 18 and 57; OMEGA00000299, 11 August 2021, slide 20 and OMEGA00001262, 11 February 2021. <sup>104</sup> Olink's internal document OMEGA00003070, 30 September 2023.

<sup>&</sup>lt;sup>105</sup> Olink's internal document OMEGA00001120, 19 January 2024.

<sup>&</sup>lt;sup>106</sup> Olink's internal document OMEGA00001120, 19 January 2024.

<sup>&</sup>lt;sup>107</sup> Olink's internal document OMEGA00001120, 19 January 2024,

<sup>&</sup>lt;sup>108</sup> TMO's internal document, TFS00013116, 16 May 2023, slide 13

<sup>&</sup>lt;sup>109</sup> Parties' response to the Issues Letter, 17 June 2024, slide 57. An in-depth plasma proteomics workflow powered by Orbitrap Astral Mass Spectrometer (thermofisher.com) accessed 8 July 2024.

understands this is relatively low throughput compared to Olink's ability to process over 2,000 blood plasma samples per day.<sup>110</sup>

99. On balance, this evidence suggests that the prospects of the Parties' technologies becoming close competitors in the foreseeable future are limited.

#### 7.3.2.1.3 Drivers of innovation

100. While, as noted above, internal documents show that the Parties monitor HRAM/high-plex assay technologies across a number of characteristics and are aware of their respective strengths and weaknesses, the CMA has seen limited evidence in internal documents that the Parties are innovating or developing their products in response to each other, or that they perceive each other as a competitive threat. Instead, as set out in the competitive constraints section below, the Parties' internal documents suggest that TMO is largely innovating in response to HRAM competitors such as Bruker, and Olink is largely innovating in response to high-plex assay suppliers such as SomaLogic.

#### 7.3.2.2 Third-party evidence

- 101. Evidence received from third-party competitors and customers also indicates that there are key differences between the Parties' technologies, and they are generally used for different purposes.<sup>111</sup>
- 102. No customer that responded to the CMA's investigation indicated that they currently use HRAM instruments and high-plex assays for the same use cases. The CMA has also not received any evidence to indicate customers have switched between HRAM instruments and high-plex assays. Further, with the exception of one customer, the CMA has received no evidence of customers actively considering both technologies when making a purchasing decision.
- 103. When customers were asked by the CMA whether HRAM instruments and highplex assays are alternatives for their use cases:<sup>112</sup>
  - (a) No customers said that HRAM instruments and high-plex assays are good or very good alternatives for any use cases.
  - (b) Half of customers said that HRAM and high-plex assays are adequate alternatives for some use cases while highlighting important differences between the technologies.<sup>113</sup> For example, one customer considered that high-plex assays are an alternative to HRAM instruments for higher

<sup>&</sup>lt;sup>110</sup> FMN, paragraph 152.

<sup>&</sup>lt;sup>111</sup> Third-party responses to CMA's investigation.

<sup>&</sup>lt;sup>112</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 5 and 9. Not all customers answered the relevant question.

<sup>&</sup>lt;sup>113</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 5 and 9.

throughput use cases, but noted substitutability may be limited for use cases that require the analysis of post-translational modifications.<sup>114</sup> Another considered that in a basic research setting the two approaches are quite distinct and allow very different questions to be addressed, and in a more translational setting the path to clinical use for the HRAM instrument is likely to be much slower and hence less attractive such that there is little direct competition in either setting.<sup>115</sup>

- (c) Two customers indicated that the technologies are poor or very poor alternatives to each other as high-plex assays are less able to provide quantitative data on a large number of proteins in a sample,<sup>116</sup> and cannot guarantee measurement specificity (ie the correct protein is measured),<sup>117</sup> while HRAM instruments are at a disadvantage for blood plasma use cases.<sup>118</sup> One of these customers considered the technologies are complementary.<sup>119</sup>
- 104. Competitor evidence also indicated that while HRAM instruments and high-plex assays can in principle both be used for some use cases, there are key differences between the technologies.
  - (a) All but one of the competitors who responded to the CMA's investigation stated that the two technologies can be used for some of the same use cases.<sup>120</sup> Some competitors indicated that HRAM instruments and high-plex assays can be used for human blood plasma samples,<sup>121</sup> or more broadly for discovery and translational research.<sup>122</sup>
  - (b) However, all competitors who responded to the CMA's investigation indicated that there are differences between HRAM instruments and high-plex assays, including that HRAM instruments are typically used for 'untargeted' or 'hypothesis-free' analysis whereas high-plex assays are used for 'targeted' analysis.<sup>123</sup> Competitors also highlighted differences in terms of coverage, throughput, sample type, sensitivity, ease of use and scalability and indicated that the technologies can be used as complements.<sup>124</sup>

<sup>&</sup>lt;sup>114</sup> Third-party response to the CMA customers questionnaire, May 2024, question 5.

<sup>&</sup>lt;sup>115</sup> Third-party response to the CMA customers questionnaire, May 2024, question 9 and 13.

<sup>&</sup>lt;sup>116</sup> Third-party response to the CMA customers questionnaire, May 2024, question 5.

<sup>&</sup>lt;sup>117</sup> Third-party response to the CMA customers questionnaire, May 2024, question 5.

<sup>&</sup>lt;sup>118</sup> Note of call with a third party, April 2024.

<sup>&</sup>lt;sup>119</sup> Third-party response to the CMA customers questionnaire, May 2024, question 5.

<sup>&</sup>lt;sup>120</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4.

<sup>&</sup>lt;sup>121</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4.

<sup>&</sup>lt;sup>122</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4 and 5. One competitor

considered HRAM would require protein enrichment to allow analysis of human blood plasma. <sup>123</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4 and 5.

<sup>&</sup>lt;sup>124</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 4 and 5.

- 105. Competitor and customer evidence also indicated that product developments may bring HRAM instruments and high-plex assays closer together in future, although significant differences are likely to remain even with such developments.
  - (a) All competitors who responded to the CMA's investigation indicated that HRAM instruments and high-plex assays are likely to become closer rivals in the future. Competitors said that improvements in dynamic range, sensitivity, throughput, ease of use and automation, including through TMO's partnership with Seer,<sup>125</sup> would enable HRAM instruments to compete more closely with high-plex assays.<sup>126</sup> One customer also considered that the combination of Seer and TMO's Orbitrap was a solution that would bridge the gap with Olink.<sup>127</sup> Similarly, competitors indicated that innovations in coverage and the ability to detect post-translational modifications would enable high-plex assays to compete more closely with HRAM instruments.<sup>128</sup> One competitor explained that whilst developments may not lead to the full overlap between the capabilities of mass spectrometry and high-plex assays, 'it would certainly increase substitutability between the two technologies.'<sup>129</sup>
  - (b) Two customers told the CMA that overlaps between HRAM and high-plex assays are increasing due to product development.<sup>130</sup> However, one of these customers considered that HRAM instruments are likely to continue to have advantages over high-plex assays especially for customers with interest in post-translational modifications.<sup>131</sup> Another customer considered it was unlikely that high-plex assays would be able to detect a similar number of proteins as HRAM instruments and did 'not foresee a switch from HRAM to high-plex assay analyses' as a result of future product development.<sup>132</sup> One customer considered that whilst Olink has increased its coverage over the last couple of years, it does not match the sensitivity or specificity of HRAM instruments.<sup>133</sup>
- 106. More generally, most customers were unconcerned in relation to the Merger.<sup>134</sup> Some customers indicated that they were unconcerned because they considered that the Parties' technologies were complementary<sup>135</sup> or addressed different

<sup>&</sup>lt;sup>125</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 7.

<sup>&</sup>lt;sup>126</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 6.

<sup>&</sup>lt;sup>127</sup> Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>128</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 6.

<sup>&</sup>lt;sup>129</sup> Third-party response to the CMA competitors questionnaire, May 2024, question 6.

<sup>&</sup>lt;sup>130</sup> Note of call with a third party, March 2024. Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>131</sup> Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>132</sup> Note of call with a third party, April 2024. Third-party response to the CMA competitors questionnaire, May 2024, Questions 5 and 6.

<sup>&</sup>lt;sup>133</sup> Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>134</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 13. Two customers indicated concerns in relation to the Merger as it may lead to reduced innovation and competition between the Parties in the future. Third-party response to the CMA customers questionnaire, May 2024, question 13. Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>135</sup> Third-party response to the CMA customers questionnaire, May 2024, question 13.

research questions,<sup>136</sup> or because there was limited competition between the Parties.<sup>137</sup>

107. Most competitors who responded to the CMA's investigation<sup>138</sup> expressed concerns in relation to the Merger.<sup>139</sup> One competitor expressed concerns that the Merger may crowd out other competitors before healthy competition can take root in the high-plex segment where Olink operates.<sup>140</sup> One competitor indicated that further consolidation could increase barriers to entry, and several considered that the Merger would reduce innovation.<sup>141</sup>

#### 7.3.3 Conclusion on closeness of competition

- 108. The CMA considers that there is currently limited overlap between the Parties' technologies. Although there are some use cases where in principle the two technologies can be used, there are key differences between the Parties' technologies. The Parties' customers and most of the Parties' internal documents indicate that their respective technologies are generally used for different purposes.
- 109. While evidence from internal documents and third parties shows that the Parties are developing their technologies (and taking advantage of technological developments by third parties) in ways that technically brings them into closer competition, the Parties' internal documents indicate there is limited prospect that their technologies will become close competitors in the foreseeable future. The CMA has also seen limited evidence that the Parties are innovating in response to each other, or that they perceive each other as a competitive threat.

#### 7.4 Competitive constraints

110. This section describes the evidence gathered by the CMA in relation to the competitive constraints provided by other suppliers of technologies used in discovery and translational proteomics research.

#### 7.4.1 Parties' submissions

111. The Parties submitted that there are several other competitors in both the supply of HRAM instruments and the supply of high-plex assays.

<sup>140</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 11.

<sup>&</sup>lt;sup>136</sup> Third-party response to the CMA customers questionnaire, May 2024, question 13.

<sup>&</sup>lt;sup>137</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 13.

<sup>&</sup>lt;sup>138</sup> Third-party responses to the CMA competitors questionnaire, May 2024, question 11.

<sup>&</sup>lt;sup>139</sup> The CMA recognises that, in some cases, third parties may have commercial incentives to raise concerns in relation to a merger (see CMA2, paragraph 9.14). As such, the CMA may place different weight on evidence received from competitors, customers, and/or internal documents, depending on the circumstances of the case.

<sup>&</sup>lt;sup>141</sup> Third-party response to the CMA competitors questionnaire, May 2024, question 11.

- 112. The Parties submitted that TMO's closest competitors globally are other suppliers of HRAM instruments, namely Bruker, Sciex, Waters, Agilent and Shimadzu, and that TMO competes with these suppliers on innovation, quality, and price.<sup>142</sup> The Parties submitted that TMO's bidding data, as well as TMO's internal documents, show that it competes strongly with Bruker, Agilent, Waters and Sciex, and to a lesser extent with Shimadzu.<sup>143</sup>
- 113. The Parties submitted that Olink's closest competitor within the high-plex segment is SomaLogic. The Parties also stated that Olink's high-plex assays face emerging competition from Alamar and differentiated protein research technology suppliers such as Nautilus, Encodia, Quantim-SI, Nomic and NanoMasic.<sup>144</sup>
- 114. Further, the Parties submitted that they are innovating in response to threats from competitors in their respective segments.<sup>145</sup>

#### 7.4.2 CMA's assessment

- 115. Generally, TMO's internal documents and evidence from HRAM customers indicate that Bruker and Sciex are the main competitive alternatives to TMO's HRAM instruments for use in proteomics and are driving TMO's innovation efforts. All HRAM customers listed Bruker as an alternative to TMO's HRAM instruments.<sup>146</sup> Half of these customers indicated Bruker was a very good alternative and that Sciex was a good alternative.<sup>147</sup>
- 116. Similarly, Olink's internal documents and evidence from high-plex customers indicate that SomaLogic is the main competitive alternative to Olink's high-plex assays and an important driver of Olink's efforts to innovate. All high-plex customers but one<sup>148</sup> considered that SomaLogic was an alternative to Olink's high-plex assays and half of these customers<sup>149</sup> considered that it was a good alternative. Alamar was the second most mentioned high-plex assay competitor and one customer considered it to be good alternative to Olink's high-plex assays.<sup>150</sup>
- 117. Accordingly, the CMA has focused its assessment primarily on Bruker, Sciex, SomaLogic and Alamar, whilst also considering other competitors further below.

<sup>143</sup> FMN, Table 1 and paragraph 22; Parties' white paper, 19 April 2024, paragraphs 4.3–4.12.

<sup>144</sup> FMN, paragraphs 203 to 204.

<sup>&</sup>lt;sup>142</sup> FMN, paragraph 238.

<sup>&</sup>lt;sup>145</sup> Parties response to the Issues Letter, 19 June 2024, paragraph 3.

<sup>&</sup>lt;sup>146</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>147</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>148</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>149</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>150</sup> Third-party responses to the CMA customers questionnaire, May 2024.

#### 7.4.2.1 Bruker

- 118. Bruker is TMO's closest competitor and the second largest provider of HRAM instruments with a significant share of supply of [30-40]% in the HRAM instruments segment and [20-30]% in the broader supply of technologies used in discovery and translational proteomics research. As noted below, Bruker's subsidiary, Biognosys, entered into a partnership with Alamar in April 2024.
- 119. Bruker is consistently benchmarked in TMO's internal documents, in which it is identified as TMO's [≫] competitor.<sup>151</sup> TMO identifies Bruker as a significant competitive threat and notes some of the strengths of Bruker's HRAM offering, including [≫], [≫], and [≫] compared to TMO's HRAM instruments.<sup>152</sup>
- 120. Internal documents indicate that TMO regards Bruker as innovative<sup>153</sup> and that TMO innovates in response to it. For instance, TMO notes that Bruker is perceived to have [≫] HRAM instrument, and that Orbitrap Astral should allow TMO to take the leadership position back and maintain its market share against Bruker.<sup>154</sup> TMO also compares its performance to Bruker following the launch of Orbitrap Astral and notes that it expects Bruker to attempt to claim leadership in certain market segments, but that TMO [≫].<sup>155</sup>
- 121. The majority of HRAM customers who responded to the CMA's investigation considered Bruker to be a good or very good alternative to TMO for HRAM instruments.<sup>156</sup> Two customers of TMO and Bruker stated that Bruker's investments and innovations in HRAM instruments have led to it becoming a closer competitor of TMO.<sup>157</sup>
- 122. Three HRAM competitors identified Bruker as the second largest HRAM supplier, with one of them describing it as the only established and significant HRAM instrument supplier other than TMO.<sup>158</sup>
- 7.4.2.2 Sciex
- 123. Sciex is the third largest supplier of HRAM instruments but has a significantly smaller market presence than TMO and Bruker, with a share of supply of [0-5]% in

<sup>&</sup>lt;sup>151</sup> For example, TMO's internal documents, TFS\_00001626, 19 October 2022, page 2; and 'Olympus Market Introduction Plan RevA1', 24 April 2023, pages 15-16. See also TMO's internal documents, TFS\_00038993, 9 April 2023, slides 24 and 27; TFS\_00017779, 16 March 2023; and TFS\_00019141, 9 June 2023.

<sup>&</sup>lt;sup>152</sup> For example, TMO's internal documents, TFS\_00040449, 5 September 2022, page 38; TFS\_00000974, 19 October 2022; TFS\_00038902, 18 February 2023, page 56; and TFS\_00038902, 18 February 2023, page 70.

<sup>&</sup>lt;sup>153</sup> For example, TMO's internal documents, TFS\_00013098, 21 April 2023, slide 23; and TFS\_00005040, 8 April 2022, page 2.

<sup>&</sup>lt;sup>154</sup> TMO's internal documents, TFS\_00005040, 8 April 2022, page 1 and Olympus\_Business\_Plan\_RevC1, pages 1 and 9.

<sup>&</sup>lt;sup>155</sup> TMO's internal document, TFS\_00038993, 9 April 2023, slide 29–30.

<sup>&</sup>lt;sup>156</sup> Third-party responses to the CMA customers questionnaire, May 2024, question 4. One of them indicated that Bruker's HRAM are reliable instruments with high throughput.

<sup>&</sup>lt;sup>157</sup> Note of call with a third-party, March 2024. Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>158</sup> Third-party responses to the CMA competitors' questionnaire, May 2024, question 3.

the HRAM instruments segment and [0-5]% in the broader supply of technologies used in discovery and translational proteomics research.

- 124. Sciex is consistently benchmarked within TMO's internal documents, albeit to a lesser extent than [ $\approx$ ]. In particular, TMO considers Sciex to be one of its closest competitors, including because of its strengths in [ $\approx$ ], [ $\approx$ ], and [ $\approx$ ].<sup>159</sup>
- 125. Moreover, some internal documents indicate that TMO's innovation is driven by HRAM competitors such as Sciex.<sup>160</sup> For example, TMO describes the Orbitrap Astral business plan as a response to the threat posed by Sciex, among other HRAM competitors.<sup>161</sup> TMO also benchmarks against Sciex, among other HRAM competitors, [≫].<sup>162</sup>
- 126. The majority of HRAM customers that responded to the CMA's investigation considered Sciex a good or adequate alternative to TMO when purchasing HRAM instruments, citing its value for money<sup>163</sup> and describing it as a reasonable competitor to TMO and Bruker.<sup>164</sup>

#### 7.4.2.3 SomaLogic

- 127. SomaLogic is Olink's closest competitor and the second largest provider of highplex assays with a large share of supply of [40-50]% in the high-plex assays segment and [10-20]% in the broader supply of technologies used in discovery and translational proteomics research.
- 128. SomaLogic is consistently benchmarked in Olink's internal documents, and, to a much lesser extent, in TMO's internal documents. In particular, Olink considers SomaLogic to be its closest competitor<sup>165</sup> and notes that it competes with Olink on several parameters, such as coverage, throughput, cost per datapoint and sample consumption.<sup>166</sup>
- 129. In one internal document, Olink indicates that its upcoming Explore HT high-plex assay is an innovation that responds to the threat from SomaLogic.<sup>167</sup> The document suggests that Olink competes closely against SomaLogic in developing

<sup>&</sup>lt;sup>159</sup> For example, TMO's internal documents, TFS\_00038902, 18 February 2023, page 67; TFS\_00013416, 16 September 2022, page 28; Annex 9 - Olympus Market Introduction Plan RevA1, 24 April 2023, page 11; and TMO's internal document, TFS\_00040449, 5 September 2022, page 38.

<sup>&</sup>lt;sup>160</sup> For example, TMO's internal document, TFS\_00038902, 18 February, 2023, page 55.

<sup>&</sup>lt;sup>161</sup> TMO's internal document, Annex 8 – Olympus\_Business\_Plan\_RevC1, 27 April 2023, page 9.

<sup>&</sup>lt;sup>162</sup> TMO's internal document, Annex 11 – Thermo Fisher Business Plan, 13 July 2023, page 58.

<sup>&</sup>lt;sup>163</sup> Third-party responses to CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>164</sup> Third-party response to CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>165</sup> For example, Olink's internal documents, OMEGA00000404, 27 October 2021; OMEGA00000403, 27 October 2021; OMEGA00001135, 4 January 2021, slides 1 and 4; OMEGA00000201, 11 June 2021, slide 19; and OMEGA00001070, 9 August 2023, slide 24; OMEGA00000299, 17 August 2021, slide 3 and 4; OMEGA00000198, 11 June 2021; OMEGA00000133, 30 March 2021; OMEGA00000420, 3 November 2021; and Annex 30, 15 August 2022, slides 31, 91 and 122.

<sup>&</sup>lt;sup>166</sup> For example, Olink's internal documents, OMEGA00001170, 11 January 2021, slide 77; OMEGA00001725, 23 August 2021, slides 25–26; OMEGA00010796, 29 March 2022, page 2; Annex 12, June 2023, pages 24 and 25.

<sup>&</sup>lt;sup>167</sup> Olink's internal document, OMEGA00010796, 29 March 2022, page 1.

high-plex assays with high coverage/plex. The document also notes that it is important that Olink launches its Explore HT high-plex assays ahead of SomaLogic's upcoming product launch in order to maintain its leadership in the high-plex segment.

- 130. In TMO's internal documents, SomaLogic is labelled as a  $[\%]^{168}$  and benchmarked along with Olink in translational research<sup>169</sup> to TMO's Orbitrap Astral.<sup>170</sup>
- 131. The majority of high-plex customers that responded to the CMA's investigation considered SomaLogic to be a good or very good alternative to Olink when purchasing high-plex assays.<sup>171</sup> Two customers mentioned it as the only alternative to Olink.<sup>172</sup> One of them, an Olink customer, said that SomaLogic's future collaboration with Illumina might make it more attractive to this customer.<sup>173</sup>

#### 7.4.2.4 Alamar

- 132. Alamar is a new supplier of high-plex assays that announced its intention to launch a high-plex offering in January 2024.<sup>174</sup> In April 2024, Alamar entered into a partnership with Biognosys AG (**Biognosys**),<sup>175</sup> a company owned by Bruker,<sup>176</sup> to combine their respective capabilities in HRAM and high-plex assays.
- 133. Alamar is mentioned in some Olink internal documents as an [≫] competitor,<sup>177</sup> with strengths in [≫], [≫], and [≫].<sup>178</sup> Olink's internal documents refer to Alamar as an [≫] threat despite some differences with Olink's high plex assays in terms of [≫] and [≫],<sup>179</sup> and despite an expectation that it will take up to [≫] before Alamar's products are widely used by customers.<sup>180</sup>

<sup>173</sup> Note of call with a third party, March 2024.

<sup>&</sup>lt;sup>168</sup> TMO's internal document, TFS\_00018501, 12 April 2022, slide 7.

<sup>&</sup>lt;sup>169</sup> For example, TMO's internal document, TFS\_00035927, 11 September 2022, slide 26.

<sup>&</sup>lt;sup>170</sup> For example, TMO's internal documents, TFS\_00001639, 30 March 2023; and TFS\_00038993, 9 April 2023, slide 43.

<sup>&</sup>lt;sup>171</sup> Third-party responses to the CMA customers questionnaire.

<sup>&</sup>lt;sup>172</sup> Third-party responses to the CMA customers questionnaire.

<sup>&</sup>lt;sup>174</sup> FMN, paragraph 284.

<sup>&</sup>lt;sup>175</sup> Biognosys and Alamar Biosciences Forge Strategic Partnership in Proteomics to Advance Biopharma and Precision Medicine Research - Alamar Biosciences

<sup>&</sup>lt;sup>176</sup> Biognosys and Bruker Form Partnership for Advanced Proteomics CRO Services for Global Biopharma and Biomarker Customers | Bruker

<sup>&</sup>lt;sup>177</sup> For example, Olink's internal documents, Annex 14 - Olink Holding AB (publ) Board of Director's Meeting 15 August 2023, 15 August 2023, slides 50; Annex 30 - Olink Holdings AB (publ) Board of Directors Meeting, 15 August 2022, slides 116.

<sup>&</sup>lt;sup>178</sup> For example, Olink's internal document, Annex 15.11 - Olink\_ePIB, third-party report from Canaccord Genuity, 14 December 2022, slide 37 (page 494).

<sup>&</sup>lt;sup>179</sup> Olink's internal document, Annex 14 - Olink Holding AB (publ) Board of Director's Meeting 15 August 2023, 15 August 2023, page 49.

<sup>&</sup>lt;sup>180</sup> Olink's internal document, Annex 30 - Olink Holdings AB (publ) Board of Directors Meeting, 15 August 2022, page 117.

- 134. In TMO's internal documents, Alamar is benchmarked to a lesser extent, along with Olink and SomaLogic, as a high-plex assay supplier in discovery and translational research.<sup>181</sup>
- 135. Only two high-plex customers who responded to the CMA's investigation mentioned that Alamar could be an alternative to Olink when purchasing high-plex assays,<sup>182</sup> with one of them rating it as a good alternative to Olink, and the other indicating that it was too early to tell if Alamar would replace Olink.

#### 7.4.2.5 Other competitors

- 136. Other competitors appear in some of the Parties' internal documents, although they are discussed less frequently than those mentioned above.
- 137. For example, Olink describes Quantum SI, Nautilus, and Encodia as emerging competitors in protein sequencing, SpearBio as a competitor in single cell proteomics and Biognosys as an emerging competitor in HRAM instruments.<sup>183</sup> Olink's internal documents also mention Meso Scale Diagnostics LLC, Quanterix and Luminex within the proteomics space, but as competitors in low- and mid-plex assays rather than high-plex assays.<sup>184</sup>
- 138. Some of TMO's internal documents also refer to Agilent, Waters and to a lesser extent Shimadzu.<sup>185</sup> In a few internal documents, TMO monitors protein sequencing and spatial proteomics technologies as operating in the same proteomics space as HRAM and high-plex assays.<sup>186</sup>
- 139. Half of the HRAM customers who responded to the CMA's investigation considered Agilent to be an adequate alternative to TMO.<sup>187</sup>
- 140. There were no other suppliers of high-plex assays or HRAM instruments that were listed as adequate, good or very good alternatives to the Parties' technologies.<sup>188</sup>

<sup>&</sup>lt;sup>181</sup> TMO's internal document, TFS\_00018741, 7 July 2023, slide 13.

<sup>&</sup>lt;sup>182</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>183</sup> For example, Olink's internal document, 14. 15 August 2023 - Olink Holdings AB (publ) Board of Directors Meeting, 15 August 2023, pages 50 and 51.

<sup>&</sup>lt;sup>184</sup> For example, Olink's internal documents, Annex 18 - Olink\_ePIB (August 2023), August 2023, page 256; and OMEGA00000201, 11 June 2021, slide 43.

<sup>&</sup>lt;sup>185</sup> For example, TMO's internal document, TFS\_00013098, 21 April 2023, slides 12–13.

<sup>&</sup>lt;sup>186</sup> For example, TMO's internal document, TFS\_00006417, 19 December 2023, slides 6–9.

<sup>&</sup>lt;sup>187</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>188</sup> The CMA notes that one high-plex assay customer considered Luminex which is a mid-plex assay would be a good alternative to Olink's high-plex assay.

#### 7.4.3 Conclusion on alternative constraints

- 141. The CMA considers that the Parties compete more closely against rivals that use the same or similar proteomics discovery and analysis technology than against each other.
- 142. In relation to TMO, evidence from internal documents and third parties indicates that it faces a strong competitive constraint from Bruker. TMO also faces competitive constraints from Sciex, Waters, and Agilent, albeit to a lesser extent. The internal documentary evidence suggests that TMO has been innovating in response to the threat from Bruker and other HRAM competitors. Whilst no customer indicated that they would consider Shimadzu as a suitable alternative to TMO, the internal document evidence indicates that TMO does monitor this HRAM competitor.
- 143. Similarly, evidence from internal documents and third parties indicates that Olink faces a strong competitive constraint from SomaLogic, which many customers consider as a good or very good alternative to Olink's high-plex assays. SomaLogic is also frequently and closely monitored in Olink's internal documents, where it is perceived as a significant competitive threat, and one internal document suggests that Olink's most recent high-plex assay is an innovation in response to SomaLogic. The evidence indicates that, to a lesser extent, Alamar also exerts a competitive constraint on Olink, and that this constraint could increase over time.
- 144. Overall, the CMA considers that the Merged Entity will continue to face competitive constraints from competitors in HRAM instruments and high-plex assays, including over innovation and product development in respect of these technologies.

#### 7.5 Conclusion on horizontal unilateral effects theory of harm

- 145. For the reasons set out above, the CMA believes that there is currently limited overlap between the Parties' technologies. Although there are some use cases where in principle the two technologies can be used, there are key differences between the Parties' technologies. The Parties' customers and most of the Parties' internal documents indicate that their respective technologies are generally used for different purposes.
- 146. Although the Parties are improving certain aspects of their respective product offering (and taking advantage of technological developments by third parties) in ways that technically brings them into closer competition, the Parties' internal documents indicate that there is limited prospect that their technologies will become close competitors in the foreseeable future. Moreover, the CMA has seen limited evidence that the Parties are innovating in response to each other, or that they perceive each other as a competitive threat.

- 147. The CMA has also found that the Parties compete more closely against rivals that use the same or similar discovery and translational proteomics research technology than against each other. Evidence from the Parties' internal documents and third parties indicates that TMO faces a strong competitive constraint from Bruker and, to a lesser extent, Sciex, Waters, and Agilent; while Olink faces a strong competitive constraint from SomaLogic and to a lesser extent Alamar, although this constraint could increase in the future. As a result, the CMA considers that the Merged Entity will continue to face competitive constraints across HRAM and high-plex assays. The CMA believes that these competitive constraints will continue driving the Merged Entity's incentives to innovate post-Merger.
- 148. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in the supply of technologies used in discovery and translational proteomics research.

#### 7.6 Non-horizontal theories of harm

- 149. The CMA has also considered whether the Merger would give rise to competition concerns in relation to:
  - a conglomerate theory of harm; and (a)
  - (b) a vertical theory of harm.

#### 7.6.1 Conglomerate theory of harm

- 150. The concern with a conglomerate theory of harm is that the merged entity may restrict its rivals in one 'focal' market from accessing customers using its strong position in an 'adjacent' market. The merged entity could do this through linking the sales of the two products in some way, thereby encouraging customers who want its product in the adjacent market to also purchase its product in the focal market, at the expense of rivals.<sup>189</sup> The CMA will typically use the ability, incentive and effect framework to analyse this theory of harm.<sup>190</sup>
- 151. In this case, the CMA has assessed whether the Merger may lead to the foreclosure of the Parties' rivals in the supply of high-plex assays and/or HRAM instruments through a bundled offering.

<sup>&</sup>lt;sup>189</sup> CMA129, paragraph 7.30.

<sup>&</sup>lt;sup>190</sup> CMA129, paragraph 7.32.

#### 7.6.1.1 Parties' submissions

152. The Parties submitted that they lack the ability and incentive to tie or bundle highplex assays with HRAM instruments (and vice versa) to foreclose competitors. The Parties stated that customers would not consider procuring these technologies together, including because there are currently no labs where customers use both TMO's HRAM instruments and Olink's high-plex assays in the UK. Accordingly, the purchasing decisions for the two technologies are usually made by different decision makers. They also stated that their ability to offer an effective bundle is limited by the fact that HRAM instruments are typically purchased as a large oneoff capex expense through formal tenders, while high-plex assays are purchased as 'pay-as-you-go' opex expenses. Further, the Parties indicated that a significant proportion of their customers purchase their products using grants and other funding for specific research proposals and customers are unable to amend research proposals to take advantage of a bundled discount.<sup>191</sup>

#### 7.6.1.2 Third-party views

- 153. In response to the CMA's investigation, some competitors expressed conglomerate concerns.<sup>192</sup> In particular, competitors were concerned that the Merged Entity could foreclose the Parties' rivals in the supply of high-plex assays and/or HRAM instruments through a bundled offering. They indicated that it would be difficult to compete with the Merged Entity if this bundle was offered to customers at discounted prices or integrated within the Merged Entity's ecosystem.<sup>193</sup>
- 154. However, the majority of customers stated they would not be interested in a combined offering of HRAM instruments and high-plex assays.<sup>194</sup> Three customers said they do not need both technologies for their current use cases.<sup>195</sup> Another customer indicated that they have different procurement processes for the two technologies and as such would not benefit from a bundled offering.<sup>196</sup>
- 155. As discussed above, several customers indicated that cost (of both the instrument and its associated consumables and services) is a secondary factor of

<sup>&</sup>lt;sup>191</sup> FMN, paragraph 231.

<sup>&</sup>lt;sup>192</sup> Third-party response to the CMA competitors questionnaire, question 11, May 2024. Third-party submission, April 2024.

<sup>&</sup>lt;sup>193</sup> Third-party responses to the CMA competitors questionnaire, question 11, May 2024. Third-party submission, April 2024.

<sup>&</sup>lt;sup>194</sup> One customer stated they would be interested in a bundle of HRAM instruments and high-plex assays offered from the same supplier. Two customers provided mixed views.

<sup>&</sup>lt;sup>195</sup> Third-party responses to the CMA customers questionnaire, May 2024.

<sup>&</sup>lt;sup>196</sup> Third-party response to the CMA customers questionnaire, May 2024.

consideration when selecting a particular proteomics technology.<sup>197</sup> Customers stated that choice of technology is driven instead by specific research needs.<sup>198</sup>

#### 7.6.1.3 CMA's assessment

- 156. Based on the available evidence, the CMA found that the Merged Entity would lack the ability to foreclose its rivals in the supply of high-plex assays and/or HRAM instruments through a bundled offering.
- 157. The evidence indicates that there are important differences in the procurement processes for HRAM instruments and high-plex assays, and the decision makers taking the respective purchasing decisions. It also suggests that the two technologies often have different use cases and different customer sets, which would make it difficult for the Merged Entity to bundle the two technologies. Furthermore, most customers said they would not be interested in purchasing the two technologies together.
- 158. Accordingly, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in relation to this theory of harm.

#### 7.6.2 Vertical theory of harm

- 159. The concern with an input foreclosure theory of harm is that the merged entity may use its control of an important input to harm its downstream rivals' competitiveness, for example by refusing to supply the input (total foreclosure) or by increasing the price or worsening the quality of the input supplied to them (partial foreclosure).<sup>199</sup>
- 160. TMO supplies consumables and components, such as antibodies and plastic consumables, to suppliers of high-plex assays and NGS read out technology.<sup>200</sup>
- 161. The CMA has assessed whether the Merged Entity would have the ability and incentive to foreclose rival suppliers of high-plex assays and NGS read out technology, and if so what the effect in these markets would be, by (i) refusing to supply consumables and component inputs (total foreclosure); or (ii) increasing the price or worsening the quality of inputs supplied to them (partial foreclosure).<sup>201</sup>

<sup>199</sup> CMA129, paragraph 7.9.

<sup>&</sup>lt;sup>197</sup> Note of a call with a third party, March 2024. Note of a call with a third party, March 2024. Note of a call with a third party, April 2024. Note of a call with a third party, March 2024,

<sup>&</sup>lt;sup>198</sup> Note of a call with a third party, March 2024. Note of a call with a third party, April 2024.

<sup>&</sup>lt;sup>200</sup> FMN, paragraph 113, third-party submission of 28 May 2024 and note of a call with a third party.

<sup>&</sup>lt;sup>201</sup> In particular, the CMA has considered whether the Merged Entity would have the ability and incentive to foreclose rivals from using the following consumables and components as inputs: KingFisher<sup>™</sup> 96 deep-well magnet, KingFisher<sup>™</sup> Flex 96 standard-well bottom heater block, KingFisher<sup>™</sup> 96 standard-well microplate (200uL), case of 48, KingFisher<sup>™</sup> 96 deep-well microplate, v-bottom, polypropylene, case of 40, KingFisher<sup>™</sup> 96 tip comb for deep-well magnets, case of 100, Matrix<sup>™</sup> 0.5mL ScrewTop Tubes in Barcoded Latch Racks, Abgene 96 Well Polypropylene Storage

#### 7.6.2.1 Parties' submissions

162. The Parties submitted that TMO's sample preparation, sample storage and internal quality control products are not critical inputs.<sup>202</sup> The Parties submitted that these products are freely available, on a customer-agnostic basis, for purchase on TMO's website, and that TMO does not know what they are used for by its customers. They also submitted that these products are used for a wide variety of end-uses, and NGS and proteomics are only a subset of such uses. They also submitted that these products can be, and are, manufactured and/or distributed by third parties.<sup>203</sup> The Parties also identified a range of alternative suppliers that would be able to supply a number of the relevant products of concern.<sup>204</sup>

#### 7.6.2.2 Third-party views

- 163. Two competitors submitted that TMO is a large supplier of critical components for their technologies and that the Merged Entity may use its market position to undermine its downstream competitors.<sup>205</sup>
- 164. One of these competitors submitted that TMO is its sole supplier for such components, that it is not aware of any substitute, and that it would require significant time to approve and validate an alternative supplier to switch to, including because introducing a substitute component in the relevant workflow would have unknown consequences.<sup>206</sup>
- 165. The other competitor submitted that TMO is a dominant provider of certain consumables and that it is not aware of alternative suppliers of some of these.<sup>207</sup>

#### 7.6.2.3 CMA's assessment

- 166. Based on the available evidence, the CMA found that the Merged Entity would lack the ability to foreclose its downstream rivals from accessing consumable and component inputs.
- 167. The evidence suggests that there are alternative suppliers for the relevant consumable products and that the products that TMO supplies upstream are unlikely to play an important role in shaping competition in the downstream

Microplates, Nunc<sup>™</sup> 96-Well Polypropylene Storage Microplates, Nunc<sup>™</sup> 96-Well Polystyrene Conical Bottom MicroWell<sup>™</sup> Plates, Automation Reservoir, Agilent Technologies LID SEAHORSE PS CLEAR, Qubit dsDNA Quantification Assay Kit and Qubit Assay Tubes.

<sup>&</sup>lt;sup>202</sup> Parties' response to the CMA's request for information of 2 May 2024 (RFI5), paragraph 1.1.

<sup>&</sup>lt;sup>203</sup> Parties' response to RFI5, paragraphs 1.1 and 1.26.

<sup>&</sup>lt;sup>204</sup> Parties' response to RFI5, paragraphs 1.6, 1.9, 1.12, 1.15, 1.18, 1.22 and 1.25.

<sup>&</sup>lt;sup>205</sup> Third-party submissions of 26 April 2024 and 24 May 2024. Third-party response to the CMA competitors questionnaire. Note of a third-party call, April 2024.

<sup>&</sup>lt;sup>206</sup> Third-party submission of 26 April 2024, Q1(c).

<sup>&</sup>lt;sup>207</sup> Third-party response to the CMA competitors questionnaire.

markets. Further, given these products are sold by TMO on a customer-agnostic basis on its website for a variety of uses other than proteomics, it appears unlikely that TMO could stop supplying or worsening its offer only to proteomics customers.

168. Accordingly, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in relation to this theory of harm.

### 8. ENTRY AND EXPANSION

- 169. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no SLC. The CMA will consider entry and/or expansion plans of rivals who do so in direct response to the merger as a countervailing measure that could prevent an SLC. Entry or expansion by rivals that occurs irrespectively of whether the merger proceeds may be considered in the competitive assessment when appropriate.<sup>208</sup> In assessing whether entry or expansion might prevent an SLC, the CMA has considered whether such entry or expansion would be timely, likely and sufficient.<sup>209</sup>
- 170. The Parties submitted that Olink faces the threat of dynamic, emerging competition from other companies and innovators using differentiated proteins research technologies (eg Alamar, Nautilus, Encodia, QuantumSI, Nomi and Nano-Mosaic).<sup>210</sup>
- 171. In response to the CMA's third-party questionnaires, several competitors told the CMA that there are high barriers to entry and expansion in relation to the supply of technologies used in discovery and translational proteomics research (including both HRAM instruments and high-plex assays).<sup>211</sup> For example, one competitor indicated that there are significant research and development costs, long development timelines and a high level of patent protection.<sup>212</sup>
- 172. As the CMA has concluded that the merger does not give rise to competition concerns, it is not necessary to consider countervailing factors in this decision.

<sup>&</sup>lt;sup>208</sup> CMA129, paragraph 8.28.

<sup>&</sup>lt;sup>209</sup> CMA129, paragraph 8.40.

<sup>&</sup>lt;sup>210</sup> FMN, paragraph 284.

<sup>&</sup>lt;sup>211</sup> Third-party responses to the CMA customers questionnaire, questions 8 and 11, May 2024.

<sup>&</sup>lt;sup>212</sup> Third-party response to the CMA customers questionnaire, question 8, May 2024.

## DECISION

- 173. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.
- 174. The Merger will therefore not be referred under section 33(1) of the Act.

Naomi Burgoyne Senior Director Competition and Markets Authority 8 July 2024