9 February 2022	Risk asse	essment for	SARS-CoV-2 variant: VUI-22JAN-01 (BA.2)	UK Health Security Agency
Indicator	Red, amber or green status*	Confidence level	Assessment and rationale As Omicron (B.1.1.529/BA.1) is currently the dominant va uses the characteristics of BA.1 as the baseline (for exar to BA.1).	ariant in the UK this risk assessment nple, amber indicates equivalence
Overall growth advantage	Red	Moderate	There is evidence of a growth advantage for BA.2 compared to BA.1 in more than one country There is evidence of a continued growth advantage for BA.2 compared to BA.1 in community cases in all regions of England. This growth advantage is visible in some other countries but is not clearly the same across all countries with genomic surveillance at present. Prior variant exposure and timing may contribute to differences between countries.	
Growth advantage 1: Transmissibility	Red	Low	It is plausible that transmissibility and/or a shorter serial interval is contributing to the growth advantage Given the lack of apparent immune evasion, it is plausible that a change in transmissibility is contributing to the growth advantage. It is unclear at present how this would arise from the BA.2 mutation profile. Preliminary analysis using contact tracing data suggests a shorter serial interval for BA.2 compared to BA.1.	
Growth advantage 2: Immune evasion	Amber	Moderate	There is evidence of a small antigenic distance between BA.1 and BA.2 but no evidence of a difference in vaccine effectiveness in English data Neutralisation studies using monoclonal antibodies and some preliminary studies using sera suggest a small antigenic difference between BA.1 and BA.2, which is expected from the mutation profile. However, sera from individuals with recent booster vaccinations neutralise both variants similarly. Neutralisation studies use recent vaccinee sera and it is unclear whether the difference between variants will increase as the responses wane. There is no detected change in vaccine effectiveness against symptomatic infection in England though international data are noted. There is insufficient laboratory or epidemiological data regarding the likelihood of reinfections in the unvaccinated, which may be relevant for transmission in children. There are no detected sequence-confirmed BA.2 after BA.1 reinfections at present.	
Infection severity			Insufficient data	

No systematic analyses comparing BA.1 and BA.2 are as yet available.

\* Refer to scale and confidence grading slide.