Please find attached a report presenting our estimates of the potential size of the Wuhan novel coronavirus outbreak, based on a simple analysis of the two cases detected in Thailand and Japan. Put simply, seeing two exported cases if the outbreak were only 40-50 cases total would be very unlikely. We estimate that between 189 and 3500 cases have occurred by 6th January, with a central estimate of 1149. Our analysis does not directly address transmission routes, but past experience with SARS and MERS-CoV outbreaks of similar scale suggests currently self-sustaining human-to-human transmission should not be ruled out.

From discussions with WHO, it is unclear what, if any, general hospital surveillance for the novel virus is being undertaken in hospitalised patients with severe respiratory disease in Wuhan. We would suggest this is a high priority.

We will be distributing this to colleagues in WHO and US CDC shortly, and plan to release publicly tomorrow.

Very happy to answer questions or discuss (email or mobile is best). Hopefully we have covered the (many) uncertainties involved in generating these estimates in the report.

Best, Neil Professor Neil Ferguson Director, MRC Centre for Global Infectious Disease Analysis Head, Dept. of Infectious Disease Epidemiology Vice-Dean (Academic Development), Faculty of Medicine Imperial College London St Mary's Campus Norfolk Place London W2 1PG UK Tel Irrelevant & Sensitive Fax Email: neil.fergusor I&S _____