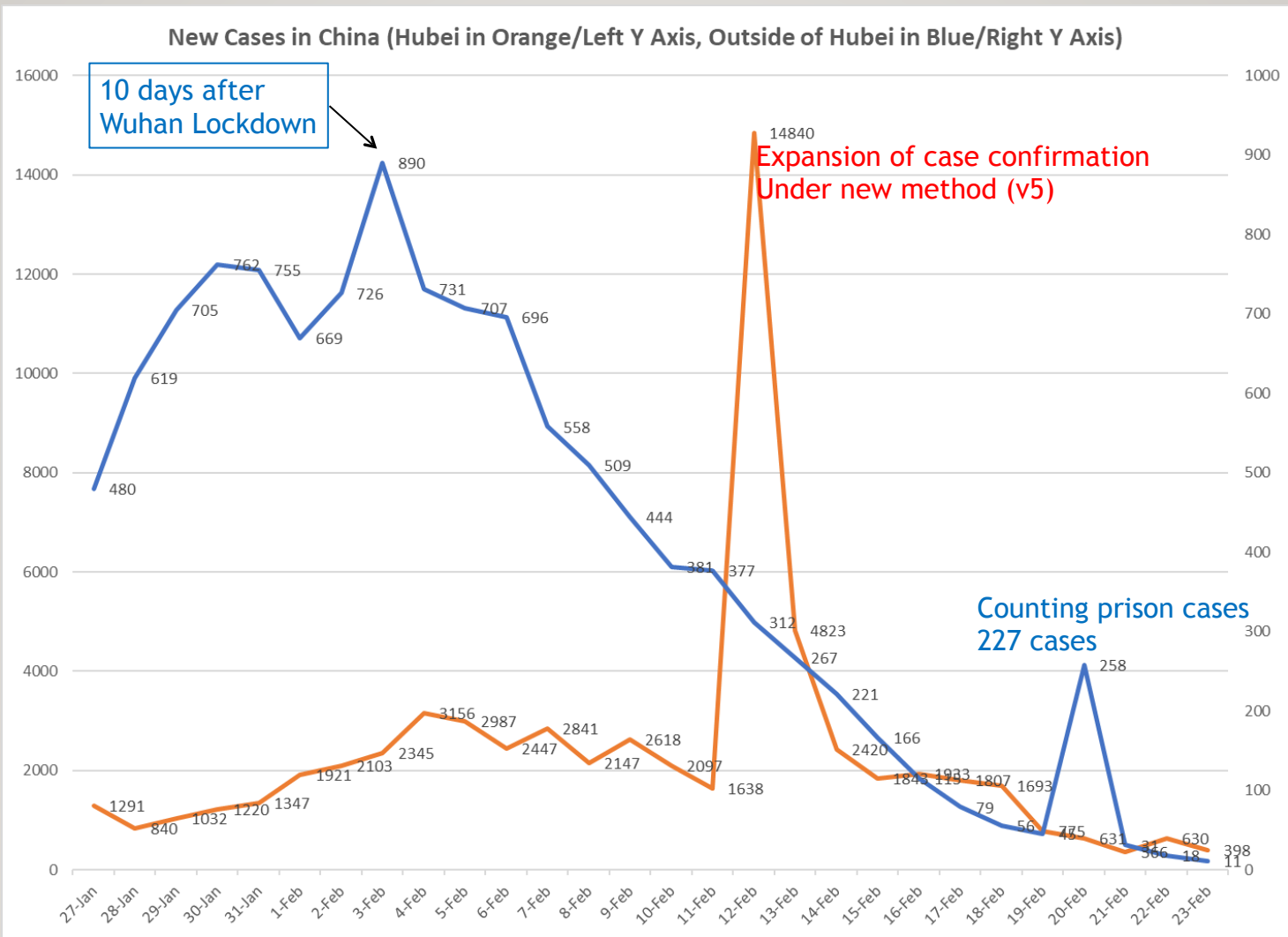


COVID-19 SITUATION REPORT

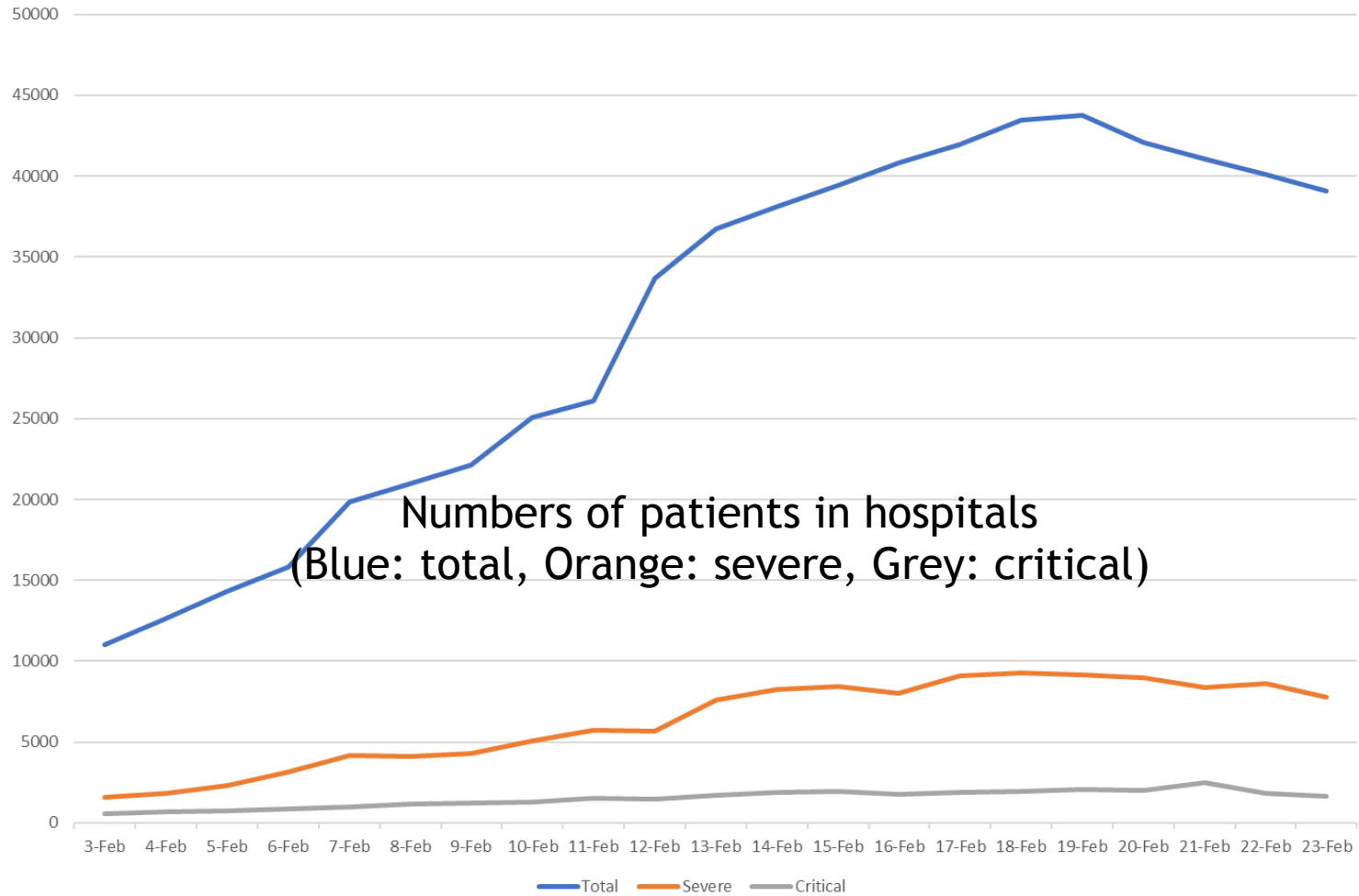
PAUL Q LI, PHD
FEB 25, 2020

SITUATION IN CHINA

- Outside of Hubei Encouraging
- Inside of Hubei Still
challenging
- Sources of spread isolated and contained
- Treatment efforts need to be improved

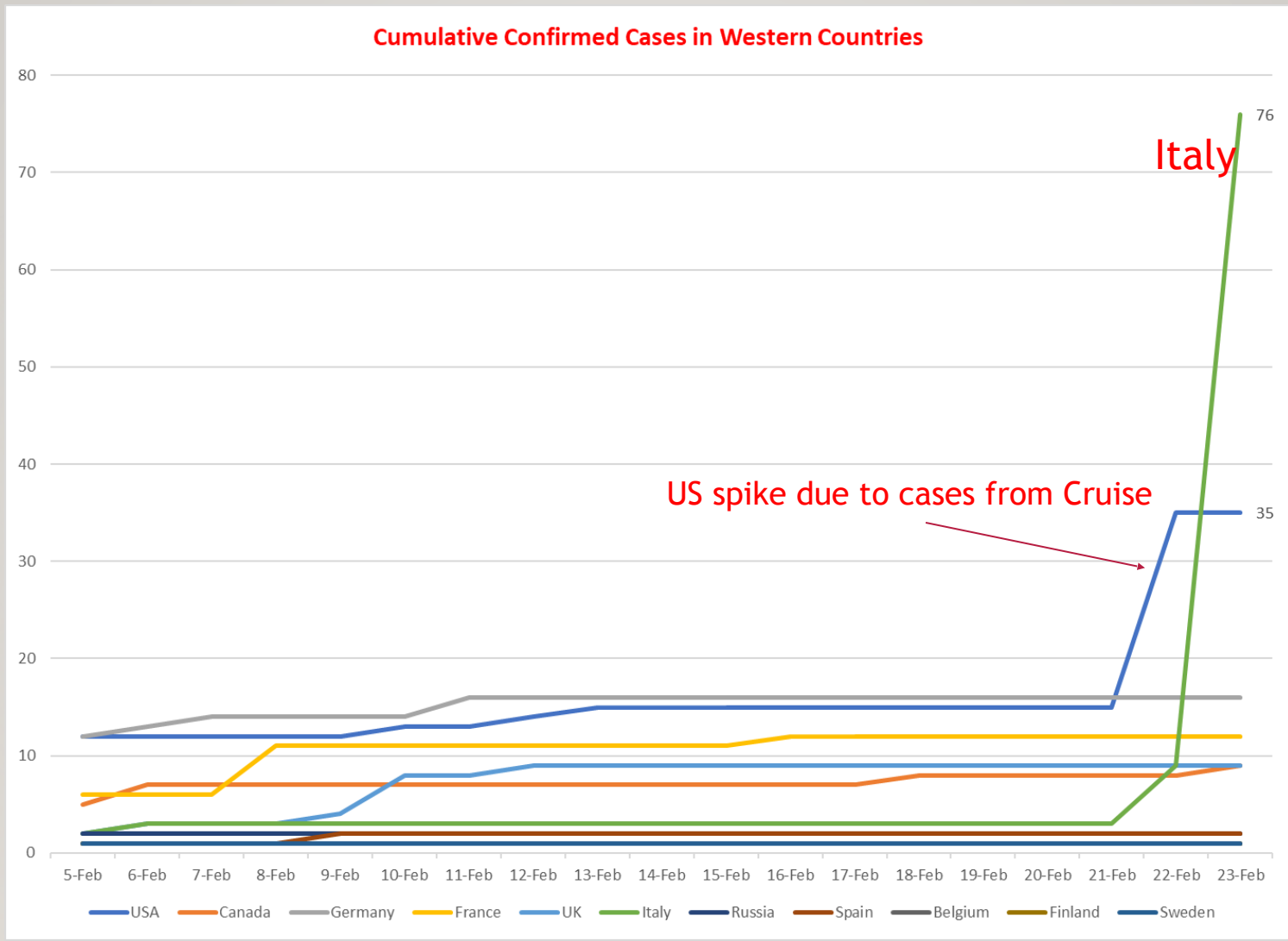


Hospitals in Hubei Under Stress

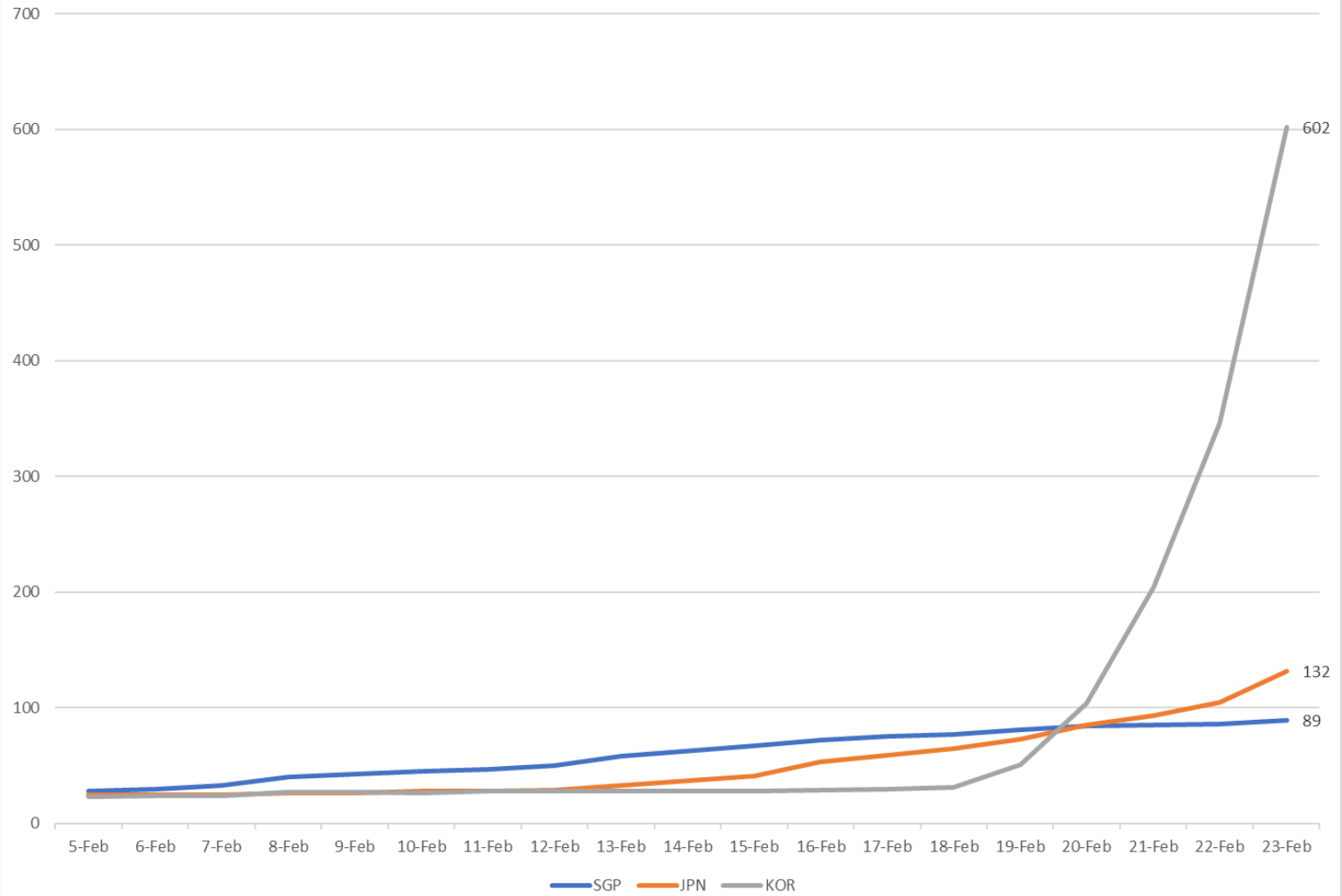


SITUATION OUTSIDE OF CHINA

- Iran and Italy are two major concerning areas
- Despite spike in cases in Korea, situation is under control
- Japan and Singapore have limited community outbreaks.
- US/Canada: no community outbreak.
- Italy situation fluid. Rest of Europe is fine.
- Iran and middle east could be the biggest risk.



Cumulative cases in Korea Japan and Singapore



SITUATION IN USA

- No new local cases for 11 days
- 12 travel-related cases, 2 cases of spousal transmission
- 3 cases among US citizens evacuated from China (out of ~800 total)
- 18 cases from Diamond Princess Cruise (out of ~300)
- Last flight from China Feb 5
- Community outbreak increasingly unlikely

SITUATION IN AMERICAS

- 9 cases in Canada. No other country has confirmed cases
- Six consecutive days no local infection in Canada
- Community outbreak in Canada unlikely thanks to sparse population density
- Climate in Central and South America not conducive for the spread of the virus

SITUATION IN EUROPE

- Countries >7 days no new local cases: UK Germany France Russia Spain Belgium Finland Sweden
- Italy is concerning:
 - 76 confirmed as of Feb 23
 - 73 cases considered community outbreak, origin of which unidentified
 - Porous borders with other European countries represent a threat of secondary outbreak in other European countries
 - Italian government taking strong measures to limit access to the affected areas

SITUATION IN KOREA

- Recent spike in new cases due to community outbreaks
- 763 confirmed cases (2/24 9:00 am)
- Patient No 31 led to a catholic cult group outbreak
- Korean government responded quickly:
 - ~28K people isolated
 - Immediate testing was implemented: 19K tested negative
 - Monitoring communities where outbreak occurred
 - Tracking patient history on individual basis

SITUATION IN JAPAN/SINGAPORE

- 132 confirmed cases in Japan, 89 in Singapore (2/23)
- Both countries have taken similar strong measures as China Korea have done
- Community outbreaks exist but limited
- Overall situation under control

ARE DATA RELIABLE?

- Underreporting exists due to technical issues
 - Difficult in sample acquisition from patients
 - Sensitivity of the diagnostic technology
 - Shortage in the supply of diagnostic kits
- Trends are more important than numbers

ASYMPTOMATIC TRANSMISSION

- Anecdotal but not conclusive
 - Published research from Germany questioned
 - Anecdotes reported from China
 - Asymptomatic transmission is extremely rare
- Will the virus stay in the population?
 - Possible, but no proof/ vast majority of recovered patients are cleared of virus
 - Attenuated form of the virus may stay in body in extremely rare cases