

Updated [4/30/20]

Review completed by: [Rose Ann Huynh]

Peer Review by: [Dr. Jason Rosenfeld]

Key topic areas / questions identified:

Are men at more risk for adverse effects from COVID-19 than women?

Key Findings:

4 studies were reviewed (Total n=60,153; Majority of sample in China. Other countries: United States).

- Greater incidence of disease and mortality in the male versus female population<sup>1-4</sup>.
- Longer clinical course in the male versus female population.
- The strongest support for the COVID-19 discrepancy in males is linked to the pathophysiology of the virus. Angiotensin-converting enzyme 2 (ACE2) is a functional receptor for coronaviruses and is highly expressed in the heart, lungs, kidneys and testis. Levels are generally higher in males versus females<sup>5</sup>.
- Comorbidities may also play a factor in the COVID-19 discrepancy (hypertension, diabetes, and cardiovascular disease).

Recommendations:

- The sex and gender disparities observed in COVID-19 vulnerability emphasize the need to better understand the impact of sex and gender on incidence and case fatality of the disease and to tailor treatment according to sex and gender<sup>6</sup>.
- Clinical suspicion, accompanied by a relevant epidemiological history, should be followed by early imaging and virological assay<sup>2</sup>.

References:

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