タイトルって考えんのめんどくさいよね。 ちなみに今日の晩御飯は 「レンジでできる、豚の角煮」です。

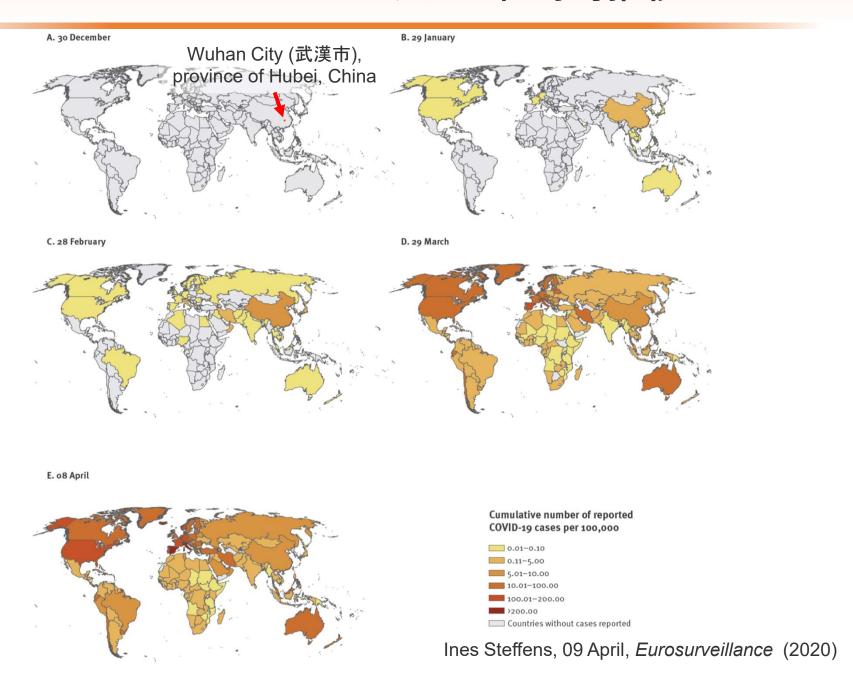
Covid-19の症状

The most common symptoms of COVID-19 are fever(熱), dry cough(咳), and tiredness (疲労). Other symptoms that are less common and may affect some patients include aches and pains (痛み), nasal congestion (鼻づまり), headache (頭痛), conjunctivitis (結膜炎), sore throat (のどの痛み), diarrhea (下痢), loss of taste or smell (嗅覚や味覚の喪失) or a rash on skin (皮膚の発疹) or discoloration of fingers or toes (指やつま先の変色). These symptoms are usually mild and begin gradually. Some people become infected but only have very mild symptoms.

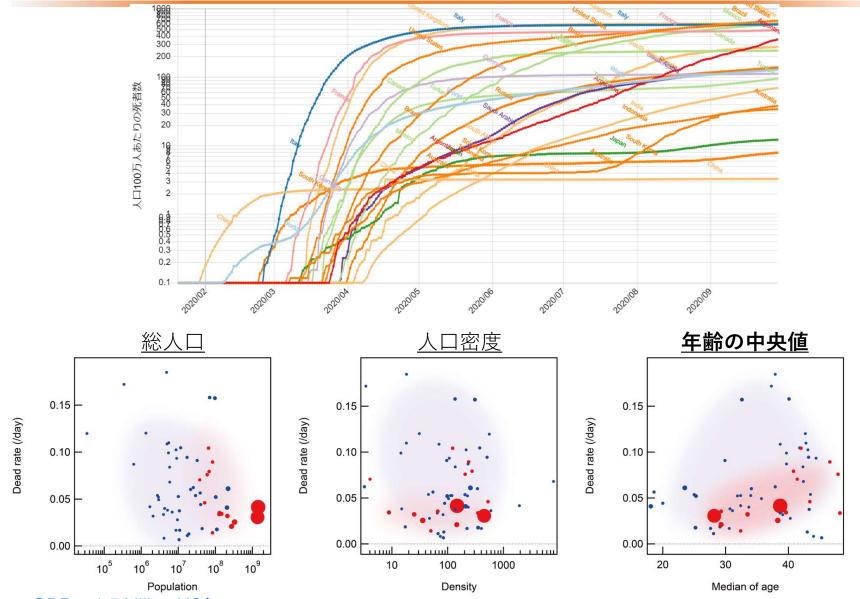
Most people (about 80%) recover from the disease without needing hospital treatment. Around 1 out of every 5 people who gets COVID-19 becomes seriously ill and develops difficulty breathing. (20%の罹患者は深刻な症状になるよ!) Older people, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, or cancer, are at higher risk of developing serious illness. However, anyone can catch COVID-19 and become seriously ill. (誰が重篤患者になってもおかしくないよ!)

(WHO Q&A on coronaviruses (COVID-19))

Covid-19パンデミックの経時的推移



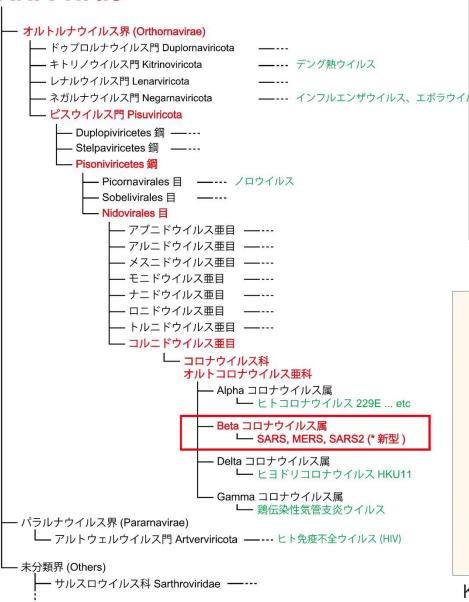
Covid-19による死者数

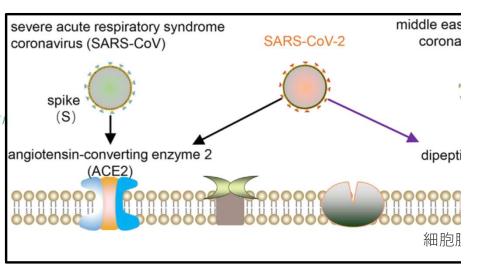


Blue: GDP < 1.5 billion US\$ Red: GDP > 1.5 billion US\$

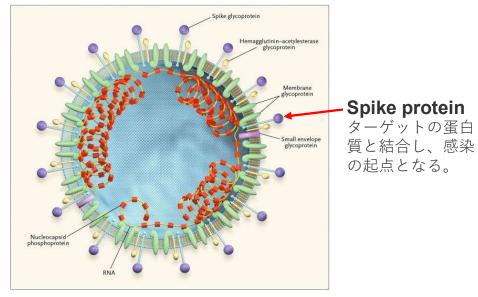
Covid-19を発症させるSARS-cov2(コロナウイルス)

RNA virus



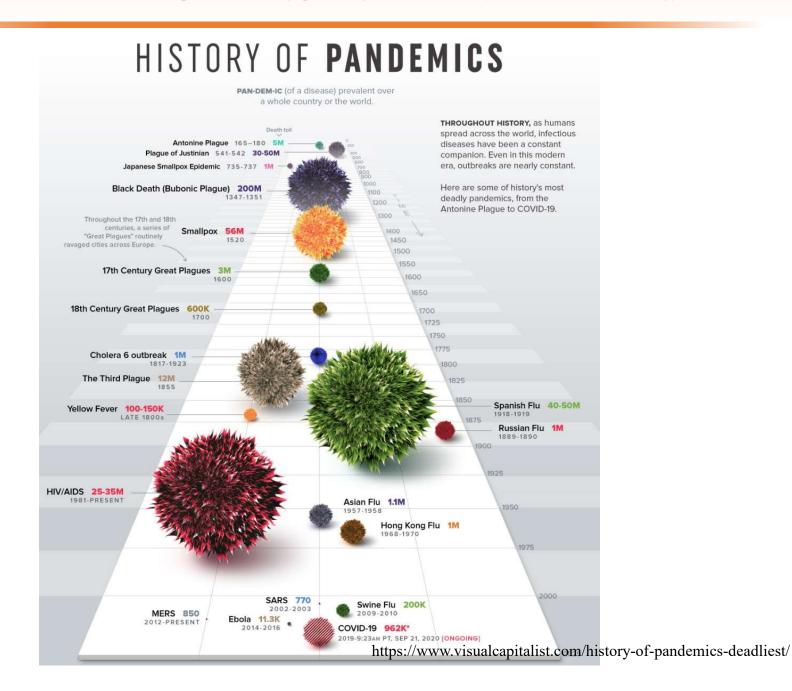


Li et al., 26 June, *iScience* (2020)



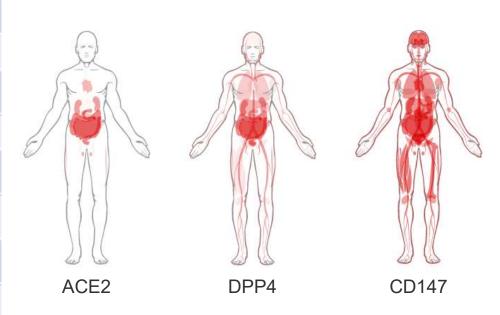
Kathryn V. Holmes,, 15 May, New Eng. J. Med.(2003)

これまでの有名な世界規模の感染症との比較

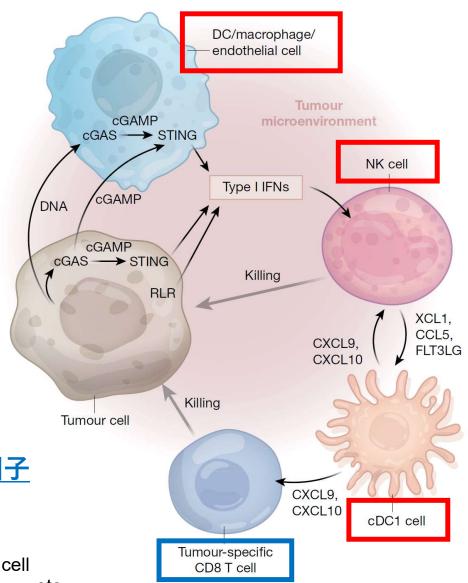


感染の生理学

	ACE2	DPP4	CD147
Brain			+
Eye			
Endocrine tissues (内分泌組織)	+		+
Lung			
Proximal digestive tract (近位消化管)		++	++
Gastrointestinal tract (胃腸管)	+++	+++	+++
Liver & gallbladder (肝臓、胆のう)	+++		++
Pancreas (膵臓)			+
Kidney & urinary bladder (腎臓、膀胱)	+++	+++	+++
Male and female tissues (生殖器官)	+++	+++	+++
Muscle			++
Adipose & soft tissue (脂肪、柔組織)			
Skin			+
Bone marrow & lymphoid tissues (骨髄、リンパ組織)			++
Blood			



免疫応答



先天性免疫因子

- 1. Natural killer (NK) cell
- 2. Macrophage
- 3. Dendritic cell (DC)
- 4. Endothelial cell
- 5. Neutrophill
- 6. Mast cell

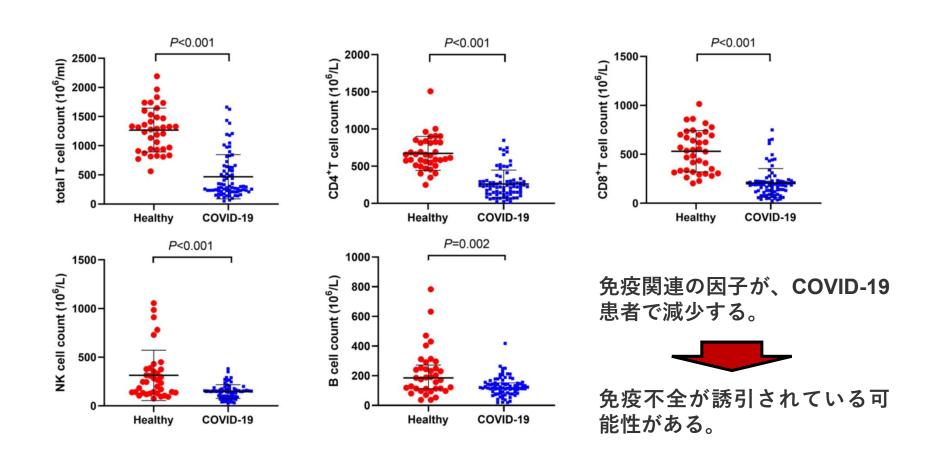
... etc

獲得免疫因子

- 1. CD8+T cell
- 2. CD4+ T cell
- 3. B cell
- 4. Natural killer T cell

... etc

COVID-19による免疫不全症状



我々は何に関心を置くべきか

Most people (about 80%) recover from the disease without needing hospital treatment. Around 1 out of every 5 people who gets COVID-19 becomes seriously ill and develops difficulty breathing. (20%の罹患者は深刻な症状になるよ!) Older people, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, or cancer, are at higher risk of developing serious illness. However, anyone can catch COVID-19 and become seriously ill. (誰が 重篤患者になってもおかしくないよ!)

(WHO Q&A on coronaviruses (COVID-19))

Nature, News Feature

How COVID-19 can damage the brain

Nature, News Feature

The lasting misery of coronavirus long-haulers

What is important in this COVID-19 pandemic is focusing on the "Long-term impact".

終わりに,ワクチン治療に関して