

Disease Waves of SARS-CoV-2 in Iran Closely Mirror Global Pandemic Trends

Zohreh Fattahi, PhD^{1,2#}; Marzieh Mohseni, PhD^{1,2#}; Maryam Beheshtian, MD, PhD^{1,2}; Ali Jafarpour, MSc^{3,4}; Khadijeh Jalalvand, BSc¹; Fatemeh Keshavarzi, MSc¹; Hanieh Behravan, BSc¹; Fatemeh Ghodratpour, MSc¹; Farzane Zare Ashrafi, MSc¹; Marzieh Kalhor, MSc¹; Maryam Azad, BSc²; Mahdieh Koshki, BSc²; Azam Ghaziasadi, PhD³; Mohamad Soveyzi, MSc¹; Alireza Abdollahi, MD, PhD⁵; Seyed Jalal Kiani, PhD⁶; Angila Ataei-Pirkooh, PhD⁶; Iman Rezaeiazhar, MSc³; Farah Bokharaei-Salim, PhD⁶; Mohammad Reza Haghshenas, PhD⁷; Farhang Babamahmoodi, MD, PhD⁷; Zakiye Mokhames, PhD⁸; Alireza Soleimani, MD, PhD⁹; Zohreh Elahi, MSc¹; Masood Ziaee, MD, PhD¹⁰; Davod Javanmard, PhD¹⁰; Shokouh Ghafari, PhD¹⁰; Akram Ezani, MSc¹¹; Alireza Ansari Moghaddam, PhD¹²; Fariba Shahraki-Sanavi, PhD¹²; Seyed Mohammad Hashemi Shahri, MD, PhD¹³; Azarakhsh Azaran, PhD¹⁴; Farid Yousefi, MD, PhD¹⁵; Afagh Moattari, PhD¹⁶; Mohsen Moghadami, MD, PhD¹⁷; Hamed Fakhim, PhD¹⁸; Behrooz Ataei, MD, PhD¹⁸; Elahe Nasri, MD, PhD¹⁸; Vahdat Poortahmasebi, PhD¹⁹; Mojtaba Varshochi, MD, PhD²⁰; Ali Mojtahedi, PhD²¹; Farid Jalilian, PhD²²; Mohammad Khazeni, MSc²³; Abdolvahab Moradi, PhD²⁴; Alijan Tabarraei, PhD²⁴; Ahmad Piroozmand, PhD²⁵; Yousef Yahyapour, PhD²⁶; Masoumeh Bayani, MD, PhD²⁶; Fatemeh Tavangar, BSc²⁷; Mahmood Yaghoubi, PhD²⁸; Fariba Keramat, MD, PhD²⁹; Mahsa Tavakoli, PhD³⁰; Tahmineh Jalali, PhD^{30,31}; Mohammad Hassan Pouriayevali, PhD^{30,31}; Mostafa Salehi-Vaziri, PhD^{30,31}; Hamid Reza Khorram Khorshid, MD, PhD¹; Reza Najafipour, MD, PhD¹; Reza Malekzadeh, MD³²; Kimia Kahrizi, MD¹; Seyed Mohammad Jazayeri, MD, PhD³; Hossein Najmabadi, PhD^{1,2*}

Full list of authors' affiliations is available at the end of the article.

Supplementary file 1

Figure S1. Detailed overview of lineages in each month and each outbreak peak.

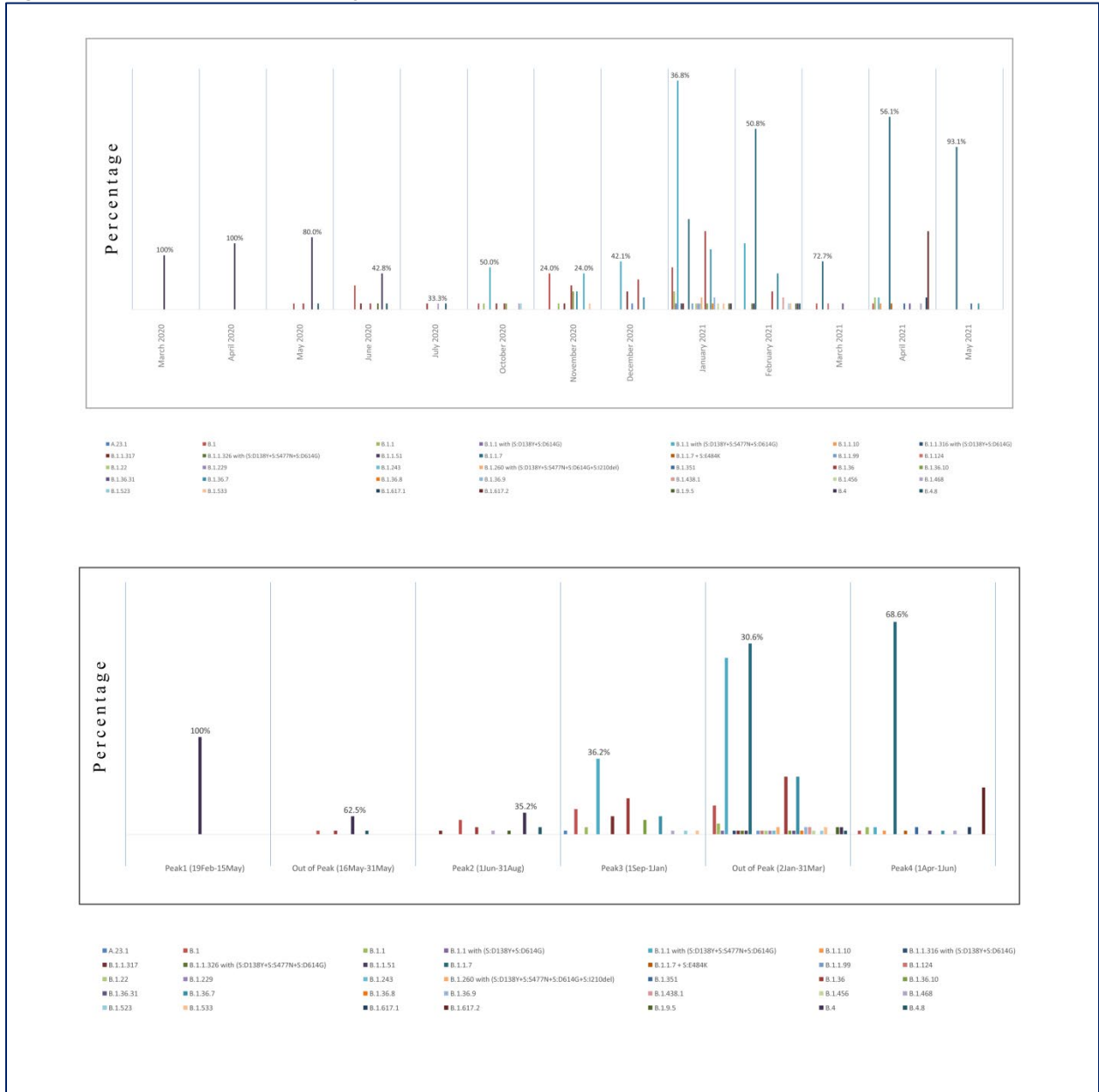


Figure S2. Top mutations in the first wave of SARS-CoV-2 infection (March-May 2020)

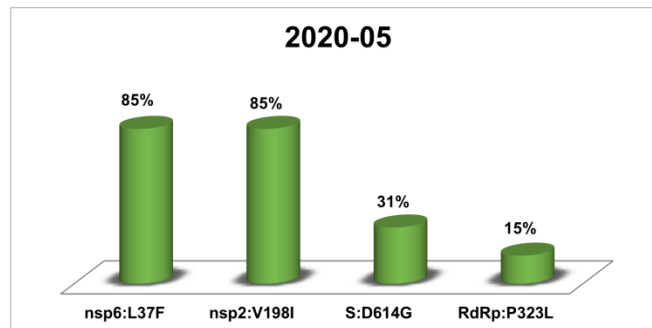
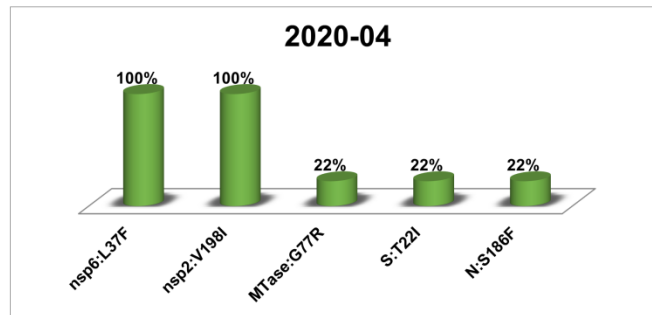
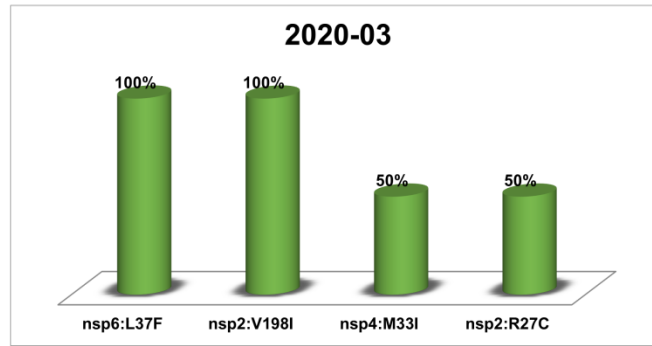


Figure S3. Top mutations in the second wave of SARS-CoV-2 infection (June-August 2020)

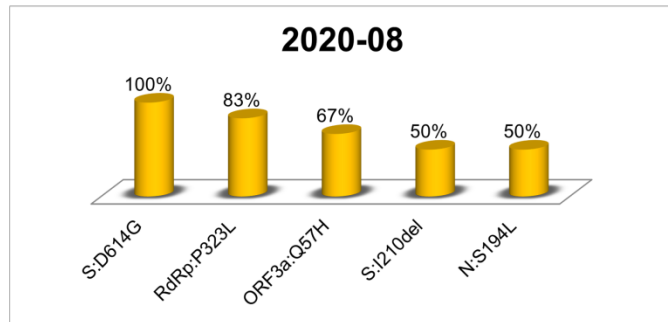
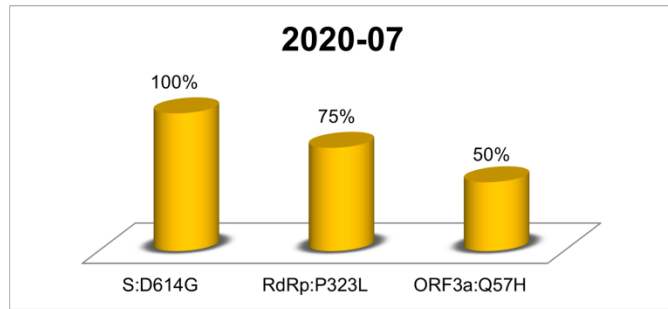
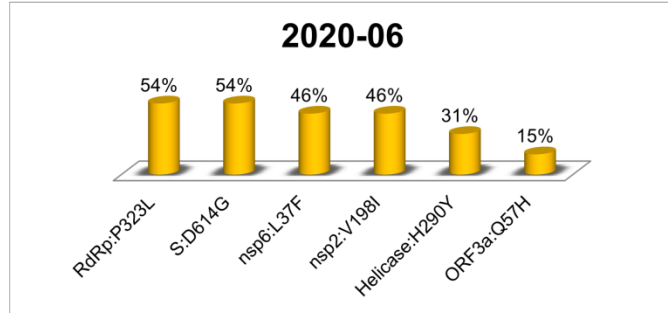


Figure S4. Top mutations in the third wave of SARS-CoV-2 infection (September-December 2020)

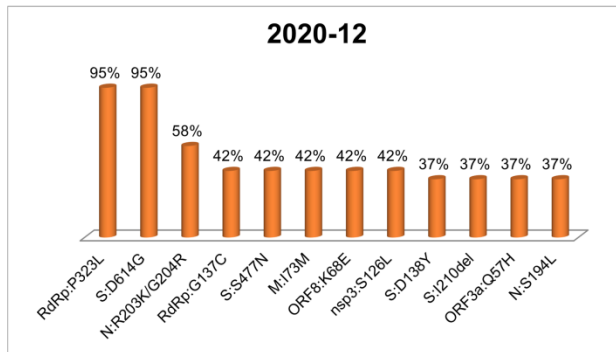
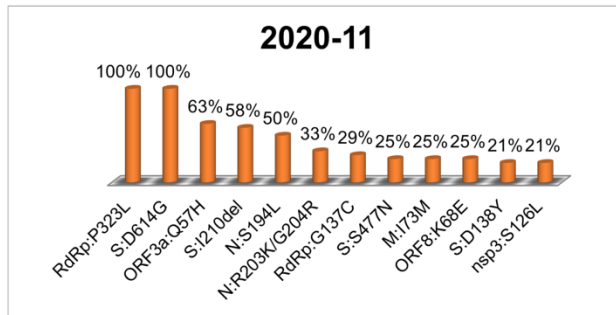
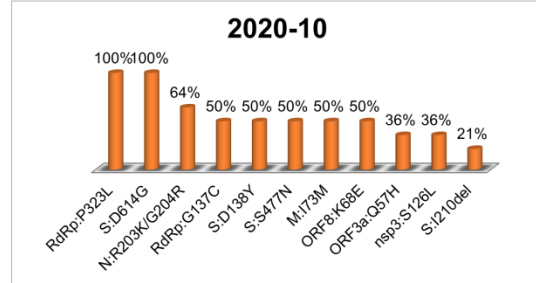
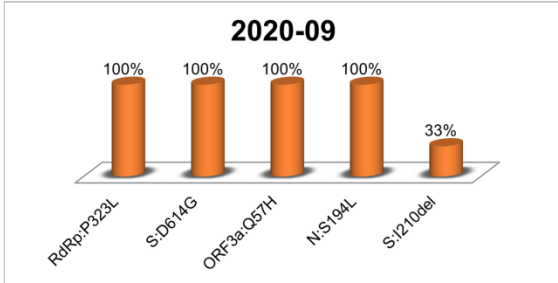


Figure S5. Top mutations in January-March 2021

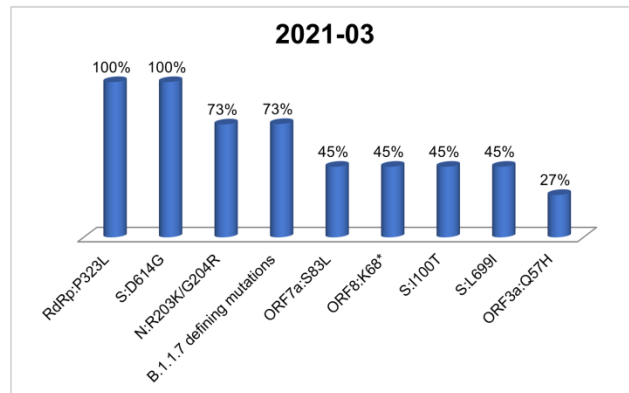
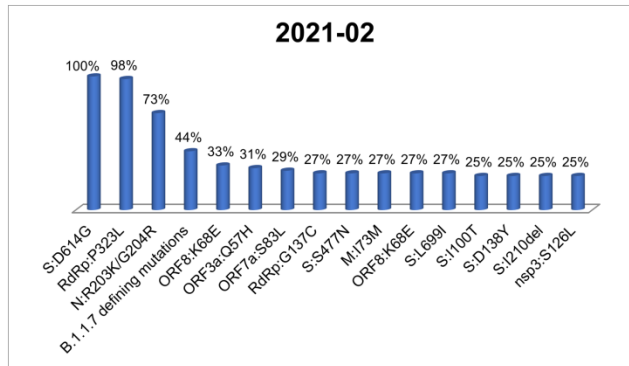
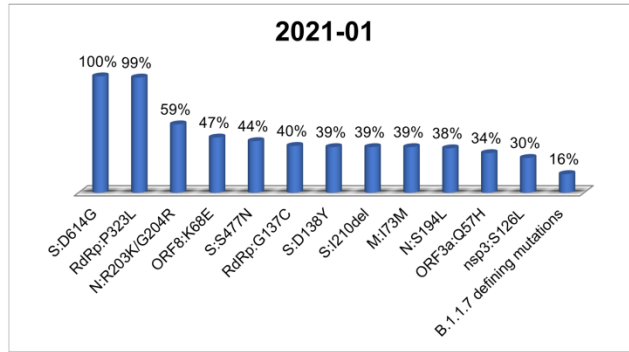


Figure S6. Top mutations in the fourth wave of SARS-CoV-2 infection (April-May 2021)

