

# Eastern Mediterranean Health Genomics & Biotechnology Network



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EMGEN newsletter (Special Issue-115 on COVID-19 and Monkeypox)

Number 5-36, July, 2022

## Novel Coronavirus (COVID-19) Research and EMRO countries

Row	Article	link	Country
1	Exploring COVID-19 pandemic side effects: the case of routine immunization in Afghanistan	<a href="https://pubmed.ncbi.nlm.nih.gov/35861477">https://pubmed.ncbi.nlm.nih.gov/35861477</a>	Afghanistan
2	The role of metacognition in promoting deep learning in MOOCs during COVID-19 pandemic	<a href="https://pubmed.ncbi.nlm.nih.gov/35875636">https://pubmed.ncbi.nlm.nih.gov/35875636</a>	Egypt, Saudi Arabia

<b>3</b>	The mutational landscape of SARS-CoV-2 variants of concern recovered from Egyptian Patients in 2021	<a href="https://pubmed.ncbi.nlm.nih.gov/35875574">https://pubmed.ncbi.nlm.nih.gov/35875574</a>	Egypt
<b>4</b>	Bleeding and thrombotic complications in patients with severe COVID-19: a prospective observational study	<a href="https://pubmed.ncbi.nlm.nih.gov/35873401">https://pubmed.ncbi.nlm.nih.gov/35873401</a>	Egypt
<b>5</b>	Accuracy of the traditional COVID-19 phone triaging system and phone triage-driven deep learning model	<a href="https://pubmed.ncbi.nlm.nih.gov/35869692">https://pubmed.ncbi.nlm.nih.gov/35869692</a>	Egypt
<b>6</b>	Management of the COVID-19 pandemic: challenges, practices, and organizational support	<a href="https://pubmed.ncbi.nlm.nih.gov/35869492">https://pubmed.ncbi.nlm.nih.gov/35869492</a>	Egypt
<b>7</b>	Secondary metabolites of <i>Livistona decipiens</i> as potential inhibitors of SARS-CoV-2	<a href="https://pubmed.ncbi.nlm.nih.gov/35865563">https://pubmed.ncbi.nlm.nih.gov/35865563</a>	Egypt
<b>8</b>	Thromboprophylaxis and clinical outcomes in moderate COVID-19 patients: a comparative study	<a href="https://pubmed.ncbi.nlm.nih.gov/35864037">https://pubmed.ncbi.nlm.nih.gov/35864037</a>	Egypt
<b>9</b>	Diagnosis of coronavirus disease 2019 and the potential role of deep learning: insights from the experience of Cairo University Hospitals	<a href="https://pubmed.ncbi.nlm.nih.gov/35861236">https://pubmed.ncbi.nlm.nih.gov/35861236</a>	Egypt
<b>10</b>	Characteristics, causes and impact of headache among a sample of physicians working during COVID-19 pandemic	<a href="https://pubmed.ncbi.nlm.nih.gov/35855737">https://pubmed.ncbi.nlm.nih.gov/35855737</a>	Egypt
<b>11</b>	Core shell stationary phase for a novel separation of some COVID-19 used drugs by	<a href="https://pubmed.ncbi.nlm.nih.gov/35855210">https://pubmed.ncbi.nlm.nih.gov/35855210</a>	Egypt

	UPLC-MS/MS method: study of grapefruit consumption impact on their pharmacokinetics in rats		
12	The impact of COVID-19 on the daily life and medical practice of otolaryngology physicians	<a href="https://pubmed.ncbi.nlm.nih.gov/35846808">https://pubmed.ncbi.nlm.nih.gov/35846808</a>	Egypt
13	Large tricuspid valve thrombus complicating COVID-19 pneumonia	<a href="https://pubmed.ncbi.nlm.nih.gov/35842811">https://pubmed.ncbi.nlm.nih.gov/35842811</a>	Egypt
14	Acute vestibular neuritis: a rare complication after the adenoviral vector-based COVID-19 vaccine	<a href="https://pubmed.ncbi.nlm.nih.gov/35877063">https://pubmed.ncbi.nlm.nih.gov/35877063</a>	Iran
15	The effect of applying the nursing process based on the theory of goal attainment on activities of daily living and quality of life in persons with multiple sclerosis during COVID-19 pandemic: a clinical trial	<a href="https://pubmed.ncbi.nlm.nih.gov/35877016">https://pubmed.ncbi.nlm.nih.gov/35877016</a>	Iran
16	COVID-19 causes neuronal degeneration and reduces neurogenesis in human hippocampus	<a href="https://pubmed.ncbi.nlm.nih.gov/35876935">https://pubmed.ncbi.nlm.nih.gov/35876935</a>	Iran
17	Evaluation of the dual effects of antiviral drugs on SARS-CoV-2 receptors and the ACE2 receptor using structure-based virtual screening and molecular dynamics simulation	<a href="https://pubmed.ncbi.nlm.nih.gov/35876061">https://pubmed.ncbi.nlm.nih.gov/35876061</a>	Iran
18	Effective features extraction by analyzing heart sound for identifying cardiovascular diseases related to COVID-19: a diagnostic model	<a href="https://pubmed.ncbi.nlm.nih.gov/35876034">https://pubmed.ncbi.nlm.nih.gov/35876034</a>	Iran

<b>19</b>	Health care workers' mental health in the face of COVID-19: a systematic review and meta-analysis	<a href="https://pubmed.ncbi.nlm.nih.gov/35875844">https://pubmed.ncbi.nlm.nih.gov/35875844</a>	Iran
<b>20</b>	miRNA expression in COVID-19	<a href="https://pubmed.ncbi.nlm.nih.gov/35875722">https://pubmed.ncbi.nlm.nih.gov/35875722</a>	Iran
<b>21</b>	Fungal infection in co-infected patients with COVID-19: an overview of case reports/case series and systematic review	<a href="https://pubmed.ncbi.nlm.nih.gov/35875562">https://pubmed.ncbi.nlm.nih.gov/35875562</a>	Iran
<b>22</b>	Status epilepticus due to COVID-19; a cases series and literature review	<a href="https://pubmed.ncbi.nlm.nih.gov/35874940">https://pubmed.ncbi.nlm.nih.gov/35874940</a>	Iran
<b>23</b>	Photobiomodulation improves serum cytokine response in mild to moderate COVID-19: the first randomized, double-blind, placebo controlled, pilot study	<a href="https://pubmed.ncbi.nlm.nih.gov/35874678">https://pubmed.ncbi.nlm.nih.gov/35874678</a>	Iran
<b>24</b>	Predictor role of COVID-19 anxiety on maternal competency with mediating role of mother-infant attachment: a study of structural equation modeling	<a href="https://pubmed.ncbi.nlm.nih.gov/35874078">https://pubmed.ncbi.nlm.nih.gov/35874078</a>	Iran
<b>25</b>	A review of virus-like particle-based SARS-CoV-2 vaccines in clinical trial phases	<a href="https://pubmed.ncbi.nlm.nih.gov/35873011">https://pubmed.ncbi.nlm.nih.gov/35873011</a>	Iran
<b>26</b>	Smart healthcare system for severity prediction and critical tasks management of COVID-19 patients in IoT-Fog computing environments	<a href="https://pubmed.ncbi.nlm.nih.gov/35875731">https://pubmed.ncbi.nlm.nih.gov/35875731</a>	Iraq, Pakistan
<b>27</b>	Clinical laboratory parameters and comorbidities associated with severity of	<a href="https://pubmed.ncbi.nlm.nih.gov/35873658">https://pubmed.ncbi.nlm.nih.gov/35873658</a>	Iraq

coronavirus disease 2019 (COVID-19) in  
Kurdistan Region of Iraq

- 28 A case of post COVID-19 subacute thyroiditis <https://pubmed.ncbi.nlm.nih.gov/35865769> Iraq, Jordan
- 29 Children's rates of COVID-19 vaccination as reported by parents, vaccine hesitancy, and determinants of COVID-19 vaccine uptake among children: a multi-country study from the Eastern Mediterranean Region <https://pubmed.ncbi.nlm.nih.gov/35850675> Jordan, United Arab Emirates, Oman, Saudi Arabia, Iraq, Qatar, Kuwait
- 30 Published research on COVID-19 in the Eastern Mediterranean Region: bibliometric analysis <https://pubmed.ncbi.nlm.nih.gov/35852846/> Jordan, Egypt
- 31 The public's attitude to and acceptance of periodic doses of the COVID-19 vaccine: a survey from Jordan <https://pubmed.ncbi.nlm.nih.gov/35857813> Jordan, United Arab Emirates
- 32 Impact of coronavirus 2019 pandemic on post-traumatic stress disorder symptoms among pregnant women in Jordan <https://pubmed.ncbi.nlm.nih.gov/35848375> Jordan, United Arab Emirates
- 33 Association of lung CT findings in coronavirus disease 2019 (COVID-19) with patients' age, body weight, vital signs, and medical regimen <https://pubmed.ncbi.nlm.nih.gov/35847782> Jordan, Qatar
- 34 Perceptions toward the use of over-the-counter dietary supplements during the coronavirus disease 2019 pandemic: a cross sectional study of the general public in Jordan <https://pubmed.ncbi.nlm.nih.gov/35844824> Jordan

<b>35</b>	Immunogenicity of BNT162b2 vaccine booster dose in patients with inflammatory bowel disease receiving infliximab combination therapy: a prospective observational study	<a href="https://pubmed.ncbi.nlm.nih.gov/35860742">https://pubmed.ncbi.nlm.nih.gov/35860742</a>	Kuwait, Bahrain
<b>36</b>	Insights into COVID-19 vaccines development: translation from benchside to bedside	<a href="https://pubmed.ncbi.nlm.nih.gov/35856085">https://pubmed.ncbi.nlm.nih.gov/35856085</a>	Lebanon, Saudi Arabia, Egypt
<b>37</b>	Replacement of the Alpha variant of SARS-CoV-2 by the Delta variant in Lebanon between April and June 2021	<a href="https://pubmed.ncbi.nlm.nih.gov/35876490">https://pubmed.ncbi.nlm.nih.gov/35876490</a>	Lebanon
<b>38</b>	Post-COVID-19 paradoxical vocal cord movement and dysfunctional dysphonia: a clinical case	<a href="https://pubmed.ncbi.nlm.nih.gov/35874177">https://pubmed.ncbi.nlm.nih.gov/35874177</a>	Lebanon
<b>39</b>	The effectiveness of COVID-19 vaccines in preventing hospitalizations during the Delta wave: a patient-population study at a major referral center	<a href="https://pubmed.ncbi.nlm.nih.gov/35859980">https://pubmed.ncbi.nlm.nih.gov/35859980</a>	Lebanon
<b>40</b>	Revisiting the potential role of BCG and MMR vaccines in COVID-19	<a href="https://pubmed.ncbi.nlm.nih.gov/35848578">https://pubmed.ncbi.nlm.nih.gov/35848578</a>	Lebanon
<b>41</b>	Personal economic worries in response to COVID-19 pandemic: a cross sectional study	<a href="https://pubmed.ncbi.nlm.nih.gov/35846687">https://pubmed.ncbi.nlm.nih.gov/35846687</a>	Lebanon
<b>42</b>	Unsymmetrical aromatic disulfides as SARS-CoV-2 Mpro inhibitors: molecular docking, molecular dynamics, and ADME scoring investigations	<a href="https://pubmed.ncbi.nlm.nih.gov/35875823">https://pubmed.ncbi.nlm.nih.gov/35875823</a>	Morocco, Saudi Arabia

<b>43</b>	Concomitant acute limb ischemia and myocardial infarction: another challenge of COVID-19's hypercoagulability	<a href="https://pubmed.ncbi.nlm.nih.gov/35873181">https://pubmed.ncbi.nlm.nih.gov/35873181</a>	Morocco
<b>44</b>	Erythrodermic psoriasis following SARS-CoV-2 infection	<a href="https://pubmed.ncbi.nlm.nih.gov/35868545">https://pubmed.ncbi.nlm.nih.gov/35868545</a>	Morocco
<b>45</b>	Value of hematological parameters for predicting patients with severe coronavirus disease 2019: a real-world cohort from Morocco	<a href="https://pubmed.ncbi.nlm.nih.gov/35854474">https://pubmed.ncbi.nlm.nih.gov/35854474</a>	Morocco
<b>46</b>	Assessing COVID-19 vaccine's acceptability amongst health care workers in Oman: a cross-sectional study	<a href="https://pubmed.ncbi.nlm.nih.gov/35870324">https://pubmed.ncbi.nlm.nih.gov/35870324</a>	Oman
<b>47</b>	Complications of invasive mechanical ventilation in critically ill COVID-19 patients - a narrative review	<a href="https://pubmed.ncbi.nlm.nih.gov/35874936">https://pubmed.ncbi.nlm.nih.gov/35874936</a>	Pakistan
<b>48</b>	Social contributors for the rise of COVID-19 infections in South Asia: a large cross-sectional survey	<a href="https://pubmed.ncbi.nlm.nih.gov/35874934">https://pubmed.ncbi.nlm.nih.gov/35874934</a>	Pakistan
<b>49</b>	To study the transmission dynamic of SARS-CoV-2 using nonlinear saturated incidence rate	<a href="https://pubmed.ncbi.nlm.nih.gov/35874925">https://pubmed.ncbi.nlm.nih.gov/35874925</a>	Pakistan, Saudi Arabia
<b>50</b>	Menstrual abnormalities after COVID-19 vaccines: a systematic review	<a href="https://pubmed.ncbi.nlm.nih.gov/35873308">https://pubmed.ncbi.nlm.nih.gov/35873308</a>	Pakistan
<b>51</b>	Seroprevalence of SARS-CoV-2 antibodies among eligible blood donors of Peshawar, Pakistan	<a href="https://pubmed.ncbi.nlm.nih.gov/35873102">https://pubmed.ncbi.nlm.nih.gov/35873102</a>	Pakistan

<b>52</b>	Cutaneous manifestations of coronavirus disease 2019	<a href="https://pubmed.ncbi.nlm.nih.gov/35866336">https://pubmed.ncbi.nlm.nih.gov/35866336</a>	Pakistan
<b>53</b>	Selenium and mercury concentrations in biological samples from patients with COVID-19	<a href="https://pubmed.ncbi.nlm.nih.gov/35863260">https://pubmed.ncbi.nlm.nih.gov/35863260</a>	Pakistan
<b>54</b>	The resurgence of COVID-19 in Pakistan	<a href="https://pubmed.ncbi.nlm.nih.gov/35855880">https://pubmed.ncbi.nlm.nih.gov/35855880</a>	Pakistan
<b>55</b>	Cardiac screening: an important diagnostic tool in the early identification of high-risk children with post-COVID-19 multisystem inflammatory syndrome in children	<a href="https://pubmed.ncbi.nlm.nih.gov/35846492">https://pubmed.ncbi.nlm.nih.gov/35846492</a>	Pakistan, Saudi Arabia
<b>56</b>	Modeling the impact of the vaccine on the COVID-19 epidemic transmission via fractional derivative	<a href="https://pubmed.ncbi.nlm.nih.gov/35845824">https://pubmed.ncbi.nlm.nih.gov/35845824</a>	Pakistan
<b>57</b>	A novel deep learning and ensemble learning mechanism for delta-type COVID-19 detection	<a href="https://pubmed.ncbi.nlm.nih.gov/35874982">https://pubmed.ncbi.nlm.nih.gov/35874982</a>	Qatar, Pakistan
<b>58</b>	COVID-19 and renal involvement: a prospective cohort study assessing the impact of mild SARS-CoV-2 infection on the kidney function of young healthy males	<a href="https://pubmed.ncbi.nlm.nih.gov/35877031">https://pubmed.ncbi.nlm.nih.gov/35877031</a>	Qatar, Egypt
<b>59</b>	Clinical outcomes of Pfizer-BioNTech COVID-19 vaccine in children and adolescents: a systematic review	<a href="https://pubmed.ncbi.nlm.nih.gov/35873396">https://pubmed.ncbi.nlm.nih.gov/35873396</a>	Qatar, Jordan

<b>60</b>	Impact of COVID-19 status on patients receiving neuraxial analgesia during labor: a national retrospective-controlled study	<a href="https://pubmed.ncbi.nlm.nih.gov/35875403">https://pubmed.ncbi.nlm.nih.gov/35875403</a>	Qatar
<b>61</b>	Understanding the epidemiological characteristics of the primary healthcare corporation-based COVID-19 swabbed persons in Qatar, 2020	<a href="https://pubmed.ncbi.nlm.nih.gov/35875402">https://pubmed.ncbi.nlm.nih.gov/35875402</a>	Qatar
<b>62</b>	COVID-19 risk score as a public health tool to guide targeted testing: a demonstration study in Qatar	<a href="https://pubmed.ncbi.nlm.nih.gov/35853026">https://pubmed.ncbi.nlm.nih.gov/35853026</a>	Qatar
<b>63</b>	COVID-19 and the hidden threat of diabetic microvascular complications	<a href="https://pubmed.ncbi.nlm.nih.gov/35847423">https://pubmed.ncbi.nlm.nih.gov/35847423</a>	Qatar
<b>64</b>	Urticular rash as the initial presentation of COVID-19 infection: a case report	<a href="https://pubmed.ncbi.nlm.nih.gov/35846919">https://pubmed.ncbi.nlm.nih.gov/35846919</a>	Qatar
<b>65</b>	Friend or foe-The Pfizer-BioNTech (BNT162b2) vaccination: a case report of reversible acute acalculous cholecystitis	<a href="https://pubmed.ncbi.nlm.nih.gov/35846906">https://pubmed.ncbi.nlm.nih.gov/35846906</a>	Qatar
<b>66</b>	Mothers' vaccine hesitancy towards COVID-19 immunisation for children: a nationwide cross-sectional study	<a href="https://pubmed.ncbi.nlm.nih.gov/35843603">https://pubmed.ncbi.nlm.nih.gov/35843603</a>	Qatar
<b>67</b>	Virtual screening of repurposed drugs as potential spike protein inhibitors of different SARS-CoV-2 variants: molecular docking study	<a href="https://pubmed.ncbi.nlm.nih.gov/35877432">https://pubmed.ncbi.nlm.nih.gov/35877432</a>	Saudi Arabia, Egypt, Oman

<b>68</b>	A deep learning and handcrafted based computationally intelligent technique for effective COVID-19 detection from X-ray/CT-scan imaging	<a href="https://pubmed.ncbi.nlm.nih.gov/35874855">https://pubmed.ncbi.nlm.nih.gov/35874855</a>	Saudi Arabia
<b>69</b>	Oral manifestations in young adults infected with COVID-19 and impact of smoking: a multi-country cross-sectional study	<a href="https://pubmed.ncbi.nlm.nih.gov/35860046">https://pubmed.ncbi.nlm.nih.gov/35860046</a>	Saudi Arabia, Egypt, Sudan, United Arab Emirates, Syria, Oman, Morocco
<b>70</b>	Synthesis and greener pastures biological study of bis-thiadiazoles as potential COVID-19 drug candidates	<a href="https://pubmed.ncbi.nlm.nih.gov/35845755">https://pubmed.ncbi.nlm.nih.gov/35845755</a>	Saudi Arabia, Egypt
<b>71</b>	Statistical analysis of COVID-19 data for three different regions in the Kingdom of Saudi Arabia: using a new two-parameter statistical model	<a href="https://pubmed.ncbi.nlm.nih.gov/35844450">https://pubmed.ncbi.nlm.nih.gov/35844450</a>	Saudi Arabia, Egypt
<b>72</b>	Students' perception towards new face of education during this unprecedented phase of COVID-19 outbreak: an empirical study of higher educational institutions in Saudi Arabia	<a href="https://pubmed.ncbi.nlm.nih.gov/35877461">https://pubmed.ncbi.nlm.nih.gov/35877461</a>	Saudi Arabia
<b>73</b>	Durability of SARS-CoV-2 specific IgG antibody responses following two doses of match and mixed COVID-19 vaccines regimens in Saudi population	<a href="https://pubmed.ncbi.nlm.nih.gov/35875613">https://pubmed.ncbi.nlm.nih.gov/35875613</a>	Saudi Arabia
<b>74</b>	Pityriasis lichenoides chronica induced by COVID-19 mRNA vaccination: a case report	<a href="https://pubmed.ncbi.nlm.nih.gov/35875513">https://pubmed.ncbi.nlm.nih.gov/35875513</a>	Saudi Arabia

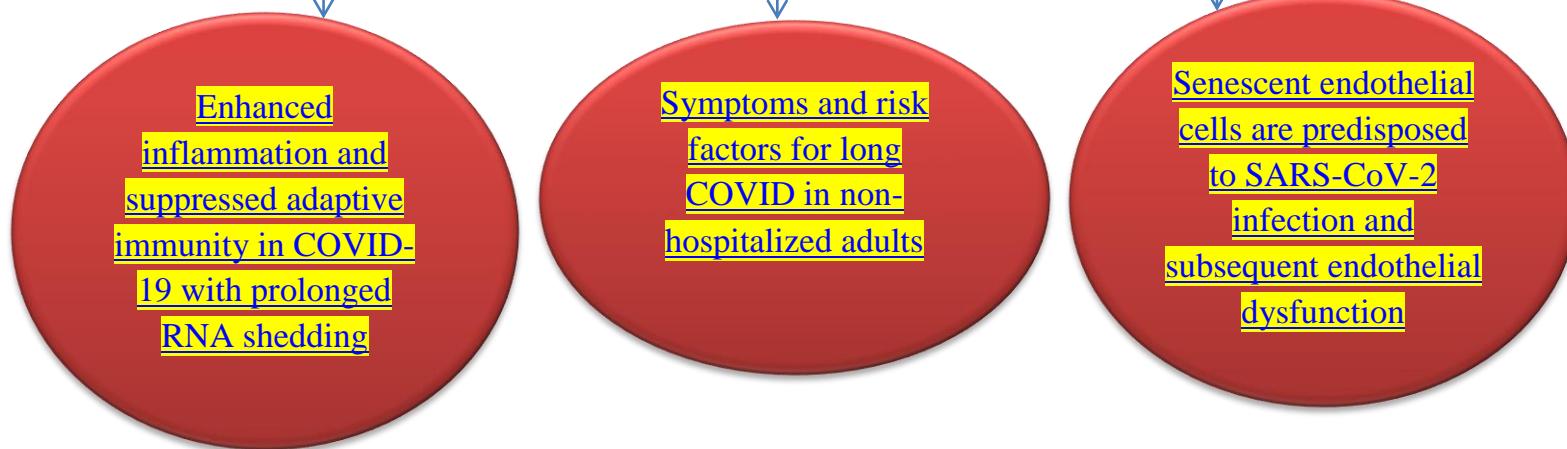
<b>75</b>	COVID-19 pandemic and its impact on perinatal outcomes between symptomatic and asymptomatic women	<a href="https://pubmed.ncbi.nlm.nih.gov/35875414">https://pubmed.ncbi.nlm.nih.gov/35875414</a>	Saudi Arabia
<b>76</b>	COVID-19 lockdown and lifestyle changes in Saudi adults with types 1 and 2 diabetes	<a href="https://pubmed.ncbi.nlm.nih.gov/35875025">https://pubmed.ncbi.nlm.nih.gov/35875025</a>	Saudi Arabia
<b>77</b>	AstraZeneca COVID-19 vaccine: a possible risk factor for ischemic stroke and cerebral venous sagittal sinus thrombosis: a case series	<a href="https://pubmed.ncbi.nlm.nih.gov/35846901">https://pubmed.ncbi.nlm.nih.gov/35846901</a>	Sudan
<b>78</b>	Knowledge and attitudes about influenza and the common cold in Syria post COVID-19: A qualitative study	<a href="https://pubmed.ncbi.nlm.nih.gov/35859759">https://pubmed.ncbi.nlm.nih.gov/35859759</a>	Syria
<b>79</b>	Presumed protective role for anti-hepatitis B virus antibodies against COVID-19 severe cases: a clinical study confirming <i>in silico</i> hypothesis	<a href="https://pubmed.ncbi.nlm.nih.gov/35872771">https://pubmed.ncbi.nlm.nih.gov/35872771</a>	Tunisia
<b>80</b>	An incidental finding of retroperitoneal paraganglioma during the coronavirus disease 2019 pandemic: a case report	<a href="https://pubmed.ncbi.nlm.nih.gov/35864516">https://pubmed.ncbi.nlm.nih.gov/35864516</a>	Tunisia
<b>81</b>	Anxiety, depression and stress-related disorders in post COVID-19: a Tunisian study	<a href="https://pubmed.ncbi.nlm.nih.gov/35855680">https://pubmed.ncbi.nlm.nih.gov/35855680</a>	Tunisia
<b>82</b>	The prevalence and implications of olfactory/gustatory dysfunctions among adult COVID-19 patients: a retrospective cohort multiethnic populations study	<a href="https://pubmed.ncbi.nlm.nih.gov/35878127">https://pubmed.ncbi.nlm.nih.gov/35878127</a>	United Arab Emirates, Egypt

<b>83</b>	Limitation of tube thoracostomy in treating pneumothorax in COVID-19 infected patients. a retrospective cohort study	<a href="https://pubmed.ncbi.nlm.nih.gov/35875057">https://pubmed.ncbi.nlm.nih.gov/35875057</a>	United Arab Emirates
<b>84</b>	The impact of health status on attitudes toward COVID-19 vaccination	<a href="https://pubmed.ncbi.nlm.nih.gov/35873399">https://pubmed.ncbi.nlm.nih.gov/35873399</a>	United Arab Emirates
<b>85</b>	AI-enhanced solutions during COVID-19: current trends and future innovations	<a href="https://pubmed.ncbi.nlm.nih.gov/35855874">https://pubmed.ncbi.nlm.nih.gov/35855874</a>	United Arab Emirates
<b>86</b>	Modelling the effect of non-pharmaceutical interventions on COVID-19 transmission from mobility maps	<a href="https://pubmed.ncbi.nlm.nih.gov/35854954">https://pubmed.ncbi.nlm.nih.gov/35854954</a>	United Arab Emirates
<b>87</b>	Ferritin, blood urea nitrogen, and high chest CT score determines ICU admission in COVID-19 positive UAE patients: a single center retrospective study	<a href="https://pubmed.ncbi.nlm.nih.gov/35852999">https://pubmed.ncbi.nlm.nih.gov/35852999</a>	United Arab Emirates

#### Monkey pox articles

<b>1</b>	Monkeypox has devastated the world; should we prepare for the outbreak of a new pandemic?	<a href="https://pubmed.ncbi.nlm.nih.gov/35860122">https://pubmed.ncbi.nlm.nih.gov/35860122</a>	Pakistan
<b>2</b>	Monkeypox virus: a spreading threat for Pakistan?	<a href="https://pubmed.ncbi.nlm.nih.gov/35860147">https://pubmed.ncbi.nlm.nih.gov/35860147</a>	Pakistan
<b>3</b>	Human monkeypox expansion from the endemic to non-endemic regions: control measures	<a href="https://pubmed.ncbi.nlm.nih.gov/35860124">https://pubmed.ncbi.nlm.nih.gov/35860124</a>	Pakistan
<b>4</b>	The outbreak of monkeypox 2022: an overview	<a href="https://pubmed.ncbi.nlm.nih.gov/35860140">https://pubmed.ncbi.nlm.nih.gov/35860140</a>	Syria

## Websites to get Coronavirus updates/reports



**Note:** You may click on each of the circles to get access to data.

# New Findings

## [Coronavirus spike protein activated natural immune response, damaged heart muscle cells, study finds](#)

Researchers have demonstrated a potential route of the SARS-CoV-2 spike protein damaging the heart. In a study evaluating mice and human heart cells, the SARS-CoV-2 spike protein inflamed the heart muscle cells, which can lead to heart injury.

## [SARS-CoV-2 variants have developed resistance to human interferons, study finds](#)

Researchers have examined five SARS-CoV-2 variants to determine how each strain interacts with the innate arm of the immune system -- the first line of defense in the immune system versus the antibody response. Study results indicate that the variants are evolving to evade human interferons.

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