Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to Editors

Beta-thalassemia may protect against COVID 19

Edouard Lansiaux has just shown that subjects from the regions of Puglia, Sardinia and Sicilia in Italy have a high prevalence of Beta-thalassemia and are, thus, more resistant to the coronavirus pneumonia called SARSCoV2, (formerly known as 2019-nCoV), that causes the COVID19 disease [1]. We should like to add that Ferrara, (132,000 inhabitants), a town in Northern Italy whose origins are from the Renaissance, situated in the region of Emilia Romagna, (4449 million inhabitants, 27,842 COVID + patients, the third place most affected in Italy), is also very resistant to the COVID-19 pandemic. On the 2nd June 2020, Italy counted 33,530 deaths and 233,197 cases COVID + . Only 500 cases of contamination have been identified in Ferrara. In addition to the prevention measures taken by the Ferrara local authorities, the phenomenon could also be explained by the geographical position of Ferrara on the Pô delta; an immense marshy area where the transmission of malaria, a short while ago, would have caused thalassemia in the inhabitants of the plain. The Pô delta, situated in the river valley, has been occupied for many millennia. Natural selection has favoured the protection of the people in this way, and not surprisingly, in the regions which have been the most affected by malaria, is more frequent. Indeed, the prevalence of Beta-thalassemia heterozygotes in Ferrara is 8%, compared to Sicilia, (7.5%), has described in Lansiaux's study. The incidence of Beta-thalassemia syndrome in Italy has been widely documented [2], strengthening the hypothesis issued by Lansiaux et al. He agreed to conduct some serological analyses within these protected populations. A recent study has shown that ORF8 and surface glycoproteins of this novel coronavirus could combine with the porphyrin to form a complex [3]. A study has showed a heme attack on the 1-beta chain of haemoglobin by COVID-19. Furthermore, the hypothesis formulated by Lansiaux strengthened the validity of the intense controversy concerning the effectiveness of hydroxychloroquine [4,5].

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