Antibodies that turn against elements of our own immune defences, known as autoantibodies, seem to be involved in almost one-fifth of COVID-19 deaths. Researchers studied more than 3,500 people from 38 countries who had very severe COVID-19. They found that around 10% of them had autoantibodies that attack and block type 1 interferons, proteins in the blood that have a crucial role in fighting off viral infections. Autoantibodies were present in 18% of people who had died of the disease. These rogue antibodies are also found in a small proportion of healthy, uninfected individuals — and their prevalence increases with age, which might help to explain why elderly people are at higher risk of severe COVID-19. (F: Nature Briefing 01.09.21)