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| **PRESS RELEASE** Paris-Saclay, July 30, 2020  **Asthma not a compounding factor for COVID-19 cases**  **A study carried out by researchers at Bicêtre Hospital, Assistance Publique-Hôpitaux de Paris / Université Paris-Saclay on a cohort of patients hospitalized for COVID-19 pneumonia has shown that asthmatics do not present an increased risk of developing a severe form of the disease. The research was published in the European Respiratory Journal on Monday July 30, 2020.**  Infections related to respiratory tropism viruses (rhinovirus, respiratory syncytial virus, influenza viruses, etc.) are the main cause of asthma exacerbation and may be associated with severe respiratory episodes in asthmatic patients. Several pathophysiological mechanisms have been put forward to explain this susceptibility to viral infections in asthmatics, first and foremost the role of type 2 inflammation (characterized by a predominant production of interleukins 4, 5 and 13, which promote eosinophilic and allergic reactions), which is believed to reduce innate immune responses and particularly the synthesis of the various types of interferons essential to the antiviral response.  The outbreak of COVID-19, related to the SARS-CoV-2 coronavirus, and characterized in its severe forms by severe pneumonia leading to a potentially fatal acute respiratory distress syndrome, could raise concerns about an increased risk of severe forms in asthmatics. Indeed, the respiratory tropism of coronaviruses is well known and some of them have already been involved in epidemics of severe pneumopathies such as SARS (Severe Acute Respiratory Syndrome) or MERS (Middle East Respiratory Syndrome).  In a general review published in 2018, prior to the emergence of CoV-2-SARS, the detection of a coronavirus in respiratory specimens during an asthma flare-up ranged from 8.4% in children to 20.8% in adults, making this family of viruses the second most common virus identified in adults after rhinoviruses and the fourth most common in children after rhinoviruses, respiratory syncytial virus and enteroviruses. Thus, there was concern that the current epidemic may be accompanied by an increased risk of SARS-CoV-2 coronavirus infection in asthmatics associated with severe lung disease and/or asthmatic flare-ups. Curiously, however, in the first publications, whether in China, Italy or the USA, asthma patients do not appear to be over-represented, especially considering the prevalence of asthma estimated at between 7 and 10% depending on the country.  The objective of the researchers from Bicêtre Hospital, AP-HP / Faculty of Medicine of the Paris-Saclay University was to describe the clinical characteristics and the fate of asthma patients hospitalized for COVID-19 pneumopathy in the spring of 2020 at Bicêtre Hospital.  In a group of 768 patients hospitalised from 15 March to 15 April 2020, 37 (4.8%) were asthmatic, a proportion broadly similar to the general population of the same age in France. These patients were younger than non-asthmatic patients hospitalised for COVID-19 pneumopathy and more often female.  It is noteworthy that none of these patients experienced a severe asthma attack warranting specific treatment on admission to hospital, confirming that this respiratory infection is less likely to exacerbate asthma than other respiratory viral infections. Furthermore, there is no evidence to suggest increased illness or mortality in these patients. Treatment of asthma was generally not altered during hospitalization, noting that continued treatment does not appear to be detrimental in patients with asthma infected with CoV-2-SARS. Further studies are underway to test the hypothesis that treatment of asthma may be beneficial during COVID-19. This study shows that asthmatics are not over-represented in a cohort of patients hospitalized for severe lung disease related to CoV-2-SARS, that mortality in infected asthma patients is not increased compared to the general population, and that asthma treatment should be maintained in these patients.    **About Paris-Saclay University**  Paris-Saclay University brings together ten university components (5 faculties, 3 IUTs, a university engineering school and an Observatoire des Sciences de l'Univers), four grandes écoles (AgroParisTech, CentraleSupélec, Institut d'Optique Graduate School, ENS Paris-Saclay), an institute for advanced research in basic sciences (IHES), two associate member universities (UVSQ and UEVE) and laboratories shared with major research organizations (CEA, CNRS, Inrae, Inria, Inserm and Onera).  Composed of 48,000 students, 9,000 teacher-researchers and 11,000 technical and administrative staff, it offers a complete and varied range of training courses from Bachelor's to Doctorate level, and is recognised for its quality of education thanks to the reputation and commitment of its teaching staff.  Located south of Paris, on land that stretches from Paris to Orsay, via Evry and Versailles, Paris-Saclay University benefits from a strategic geographical and socio-economic position that its international visibility helps to reinforce. At the same time a cutting-edge university, with a predominantly scientific focus but also recognised for its training in the human and social sciences, Paris-Saclay University operates in a classified natural environment, close to Paris, and at the heart of a dynamic economic hub.  [www.universite-paris-saclay.fr/en](http://www.universite-paris-saclay.fr/en)  Une image contenant capture d’écran  Description générée automatiquement  **About the AP-HP**  Europe's leading hospital and university center (CHU), the AP-HP and its 39 hospitals are organized in six university hospital groups (AP-HP. Centre - University of Paris; AP-HP. Sorbonne University; AP-HP. Nord - University of Paris; AP-HP. Paris Saclay University; AP-HP. Henri Mondor University Hospitals and AP-HP. Hôpitaux Universitaires Paris Seine-Saint-Denis) and are organised around five universities in the Paris region. Closely linked to major research organizations, AP-HP has three world-class university hospital institutes (ICM, ICAN, IMAGINE) and the largest French health database (EDS). A major player in applied research and innovation in health, AP-HP holds a portfolio of 650 active patents, its clinician-researchers sign nearly 9,000 scientific publications each year and more than 4,000 research projects are currently under development, all promoters combined. In 2015, PA-HP also created the PA-HP Research Foundation to support biomedical and health research conducted in all of its hospitals.  <http://www.aphp.fr>  **PRESS CONTACT**  **Neil Atherton** +33 (0)1 55 02 27 84 [n.atherton@open2europe.com](mailto:n.atherton@open2europe.com)  Unsubscribe |