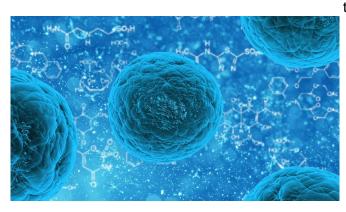


## Trial shows better protection against meningococcal infection in hematopoietic stem cell transplant recipients

29 July 2022



Credit: CC0 Public Domain

The team in the Hematology Department at Henri Mondor AP-HP Hospital, coordinated by Dr. Christine Robin, and scientists from the Institut Pasteur (the Invasive Bacterial Infections Unit led by Professor Muhamed-Kheir Taha) recently studied protection against meningococcal infection in patients who had received hematopoietic stem cell transplantation. The results were published in *Clinical Microbiology and Infection* on July 4, 2022.

Meningococcal infection is responsible for severe, often fatal diseases such as meningitis. Patients who have undergone <u>hematopoietic stem cell</u> <u>transplantation</u> (HSCT), for example to treat leukemia, are 30 times more likely than the <u>general</u> <u>population</u> to develop these severe infections.

The most recent meningococcal B vaccine (4CMenB, Bexsero) was recommended in France in 2021 for infants under the age of 2 and people at high risk, including HSCT recipients.

In this trial, the research team set out to determine

the immunogenic potential of the vaccine in HSCT recipients.

Forty <u>patients</u> between the ages of 31 and 68, who received HSCT between 6 months and 13 years prior to the trial, were included. They were vaccinated with 4CMenB (2 doses 2 months apart).

One month after the second dose, 90% of patients showed antibody levels correlated with protection; nine months later the proportion had fallen to 62%. No severe adverse events were observed.

The trial supports the inclusion of vaccination against meningococcal group B, alongside vaccination against groups A, C, W and Y, in the vaccination schedule of these patients from 6 <u>months</u> after their transplant to improve their protection.

There are several meningococcal groups and therefore several vaccines recommended for HSCT patients. Evaluation of another meningococcal B vaccine, Trumenba, in HSCT recipients could be the next stage in research into protection against meningococcal <u>infection</u>.

**More information:** Christine Robin et al, Immunogenicity and safety of the meningococcal B recombinant (4CMenB) vaccine in allogeneic hematopoietic cell transplantation recipients, *Clinical Microbiology and Infection* (2022). DOI: 10.1016/j.cmi.2022.06.024

Provided by Pasteur Institute



APA citation: Trial shows better protection against meningococcal infection in hematopoietic stem cell transplant recipients (2022, July 29) retrieved 11 October 2022 from <a href="https://medicalxpress.com/news/2022-07-trial-meningococcal-infection-hematopoietic-stem.html">https://medicalxpress.com/news/2022-07-trial-meningococcal-infection-hematopoietic-stem.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.