

3-Year Global MPN Interferon Initiative Report Released by MPN Research Foundation

Studies offer insight into who might benefit from interferon for treatment of a rare blood cancer

Chicago, IL, November 1, 2021 (NewsWire.com) - In real-world usage and in clinical trials, interferon (IFN) in a variety of forms has shown high rates of hematologic and molecular responses in many patients with rare blood cancers known as myeloproliferative neoplasms (MPNs). Other patients have no significant response, and some develop drug resistance to recombinant interferon over time.



A report summarizing a three-year Interferon Initiative, released today by the MPN Research Foundation, sheds light on the reasons for these varying responses, and may have impactful applications not only for MPNs – including polycythemia vera, essential thrombocythemia and myelofibrosis – but also for other blood cancers and solid tumors.

"The initiative brought together multi-institutional investigations by key researchers from across the US, Europe and Australia to uncover a deeper understanding of the mechanisms by which interferon works for patients with an MPN," said Barbara Van Husen, MPNRF board chair.

"It is unusual that we have been effectively using interferon for the treatment of MPNs for more than 30 years without fully understanding how it works," said Richard T. Silver, MD, director emeritus of the Silver MPN Center at Weill Cornell Medicine. "That is why the MPNRF's Interferon Initiative is so important. Interferon appears to uniquely affect the MPN stem cells and has other valuable attributes," according to Dr. Silver, also founder of the Cancer Research & Treatment Fund (CR&T), which has supported research in this field. He is one of 10 world-renowned advisors to the Interferon Initiative.

"These answers can help validate the use of newer, more disease-specific forms of IFN, as well as new approaches to more rational IFN-based drug combinations for MPN patients," according to Rick Winneker, PhD, MPNRF director of scientific strategies and author of the summary report. "The potential to define new downstream IFN signaling targets that can be modulated to enhance the activity of IFN also remains an area of research interest."

Recombinant IFN alpha (rIFN α) can reduce the mutant JAK2 allele burden associated with the majority

of people living with an MPN, but understanding how, why and sometimes why not has remained largely elusive.

The Interferon Initiative set out to:

- Increase insight into the underlying mechanism(s) of action of rIFN, especially as it relates to MPN stem and progenitor cell function;
- Better define the patient/disease profile to help predict which patients may respond to treatment and/or be resistant to therapy;
- Discover what factors lead to rIFN resistance over time and how to overcome that resistance; and
- Develop strategies to enhance the activity of rIFN or identify new therapeutic options based on IFN signaling pathways.

Project summaries here: [MPN Interferon Initiative - MPN Research Foundation](#)

The Interferon Initiative received funding support from multiple sources in addition to the MPNRF, including the MPN Australian Alliance, CR&T and PharmaEssentia.

Editors Note:

To be announced November 4, the MPNRF **2021 MPN Challenge award recipients each to receive up to \$200,000 over two years**. The projects are focused on addressing critical gaps slowing the development of new therapeutic approaches to MPNs.

Details: <https://www.mpnresearchfoundation.org>.

Contact: Ruth Fein Revell 518.858.7329 ruth@rfrwrites.com

or Rick Winneker, PhD, Director of Scientific Strategies, rwinneker@mpnrf.org

Source: MPN Research Foundation