Press Release

Chennai population's healthcare indices indicate an early onset of immuneaging; Associated risks of Diabetes & metabolic syndrome to be addressed by preventive measures

Data presented at the International Society of Experimental Hematology Conference, Kumamoto, Japan

Chennai, 6th October 2025: A retrospective study conducted by **BeWell Hospitals**, **Chennai** on the **Neutrophil-to-Lymphocyte Ratio** (**NLR**), a critical marker of inflammation and aging of the immune system of in-patients & out-patients who visited their Chennai hospitals between 2014-2024, has revealed findings of immune-aging at younger ages correlating to metabolic syndrome in Chennai population alerting measures for preventive steps to be taken early. The study reported that **NLR sharply increases after the age of 40**, with a more pronounced rise in males, recommending an intervention at least from late 20's to postpone the onset of metabolic diseases to bridge the gap between healthspan vs lifespan. **These findings were presented at the 54th Annual Scientific Meeting of the International Society of Experimental Hematology (ISEH) held in Kumamoto, Japan.**

NLR is increasingly recognized as a marker of immune wellness. It is used to predict mortality and treatment outcomes in several conditions such <u>as sepsis</u>, <u>heart disease</u>, <u>cancer</u>, <u>and infections</u>, <u>and gained prominence during the COVID-19 pandemic</u>. Importantly, an elevated NLR is associated with diabetes and is a <u>predictive marker for metabolic syndrome (MetS)</u>. This indicates the presence of chronic, low-grade inflammation that contributes to the development of diabetes, metabolic disorders, cardiovascular complications and cancer.

"As per the study results, the mean NLR in the studied urban Chennai population was found to be greater than 2.0, which is higher than other globally reported population studies. This suggests that preventive strategies must be initiated early, ideally from the late 20's to ensure healthy aging and reduce the burden of diabetes, cardiac, and metabolic diseases", opined Dr. C. J. Vetrievel, Chairman of BeWell Hospitals, the lead author of the study. He also added that a comparative evaluation of similar biomarkers in HIV+ve patients which was done in collaboration with the National AIDS Secretariat in Mauritius has revealed that the marker we have checked is highly relevant to the strength of immune system and is significant in assessing one's health for planning preventive strategies.

The study was undertaken taking advice from collaborating institutes from Japan where adoptive NK cell and T cell-based immune therapies are in clinical practice for more than two decades to manage cancer and help in anti-aging. The data presented in ISEH included two groups: immune-competent individuals and immunocompromised individuals (HIV-positive patients) taking the support from Dr. Woodun & Dr. Leste of the HIV Unit-Mauritius & staff of Nichi-In Centre for Regenerative Medicine (NCRM) – MediNippon Alliance whose new cell processing facility has been set up in Mauritius in collaboration with SoulSynergy, Mauritius. The data of HIV+ve patients revealed that NLR peaked between the ages 20-29 in HIV positive patients in Mauritius and remained persistently high thereafter in people living with HIV (PLWHIV). This highlights early immune dysregulation in this population and

underscores the urgent need for early and targeted immune interventions in HIV care, according to **Dr. Cynthia Leste**, whose team headed by **Dr. Woodun** was lauded by **Dr. Ashwamed Dinassing**, **Director of Health**, **Mauritius for their contribution to science in the domain of Immunology**. It is to be noted that <u>Dr. Ashwamed Dinassing</u> visited Japan in 2022-2023 to have interactions in person with the regulatory team of Ministry of Health & Labour Welfare (MHLW), Government of Japan to understand their <u>Act on Safety of Regenerative Medicine</u> enacted in 2014 which regulates the cell based therapies in Japan.

Aging is an inevitable process involving immune system weakness which if could be efficiently managed from an early stage, endurance of long healthy life could be possible thereby reducing the years of dependency of an individual along with the associated burden, both socially and economically. "BeWell Hospitals being in the frontier of public health services, having contributed to this kind of data-science based research would like to continue to contribute not only management of disease burden but also to preventive healthcare," added Dr. C.J. Vetrievel.

For Queries, Contact:

Mr. Abdul, BeWell Hospitals, +91- 9841174889

Data on NLR - a powerful biomarker of immune-health from BeWell Hospitals, Chennai, India & National AIDS Unit, Mauritius presented at ISEH Conference, Japan



Dr. C.J. Vetrievel (Founder & Chairman, BeWell Hospitals) (Right) with the NCRM-MediNippon Team in Chennai, India



Dr. Cynthia Leste, National AIDS Secretariat (Left-Centre) & Dr. Ashwamed Dinassing, Director, Ministry of Health & Wellness, Govt. of Mauritius (Right-Centre) with the NCRM - SoulSynergy team in Mauritius