

Case Summary: Observed Immune and Physiologic Modulation Following Repeated Dendritic-Cell Immunotherapy

Background

A 64-year-old male with no active autoimmune or infectious disease history underwent autologous dendritic-cell immunotherapy (DCI) under the supervision of Dr. Terawan Agus Putranto in Indonesia. The therapy aimed for general immune modulation and systemic wellness optimization, not treatment of a specific illness.

The patient maintains a consistently healthy lifestyle, performing cardio and resistance (weight) training 4–5 times per week, following a protein-rich diet focused on whole sustainable foods, and averaging 7 hours of sleep nightly.

He works in a high-stress occupation involving frequent travel throughout Asia.

Intervention

Immunotherapy Nusantara – an autologous dendritic-cell-based immune modulation using ex vivo-generated tolerogenic dendritic cells (tolDCs).

Five treatments were administered over a 15-month period with no concurrent immune or blood-pressure medications.

Clinical Course and Observations

Category	Baseline Status	Post-Therapy Observation	Timeframe	Probable Mechanism
Environmental allergies	Persistent seasonal pollen allergy (Aug–Nov) with sinus congestion	Complete elimination of allergic symptoms	Within 9 months, ongoing	Peripheral tolerance via Tregs and suppression of IgE-mediated pathways
Viral infection frequency	Influenza-like illness 1–2× every 2 months during travel	Reduced to ~1 episode per year; markedly shorter and milder	9–12 months, ongoing	Improved innate–adaptive coordination and reduced systemic inflammation
Exercise recovery	Typical delayed-onset muscle soreness after heavy training	Faster recovery and reduced soreness	Ongoing	Down-regulation of TNF-α/IL-6 and improved tissue repair signaling
Blood pressure	Mildly elevated baseline, no medication	Sustained reduction of ~10–12%	By 9 months, ongoing	Reduced inflammation and improved endothelial nitric-oxide signaling

Assessment

No adverse reactions were reported. Progressive improvement was observed in immune stability, infection resilience, recovery rate, and vascular regulation.

Findings align with tolerogenic dendritic-cell mechanisms described by Jonny et al. (2024), including upregulation of IL-10 and T-regulatory cells and downregulation of IL-6, TNF- α , and IFN- γ .

Limitations

Observations are anecdotal without blinded controls or laboratory immune markers. Lifestyle factors likely contributed synergistically.

No confirmed cardiovascular trials exist yet for dendritic-cell therapy.

Conclusion

Over 15 months of autologous dendritic-cell immunotherapy, the patient experienced complete resolution of chronic allergies, markedly reduced viral infections, enhanced exercise recovery, and a sustained 10–12% blood pressure decrease. These outcomes are consistent with systemic immune-tolerance restoration and inflammatory down-regulation.

Although causality cannot yet be confirmed, the case demonstrates a strong positive immune-regulatory response and supports continued clinical monitoring.