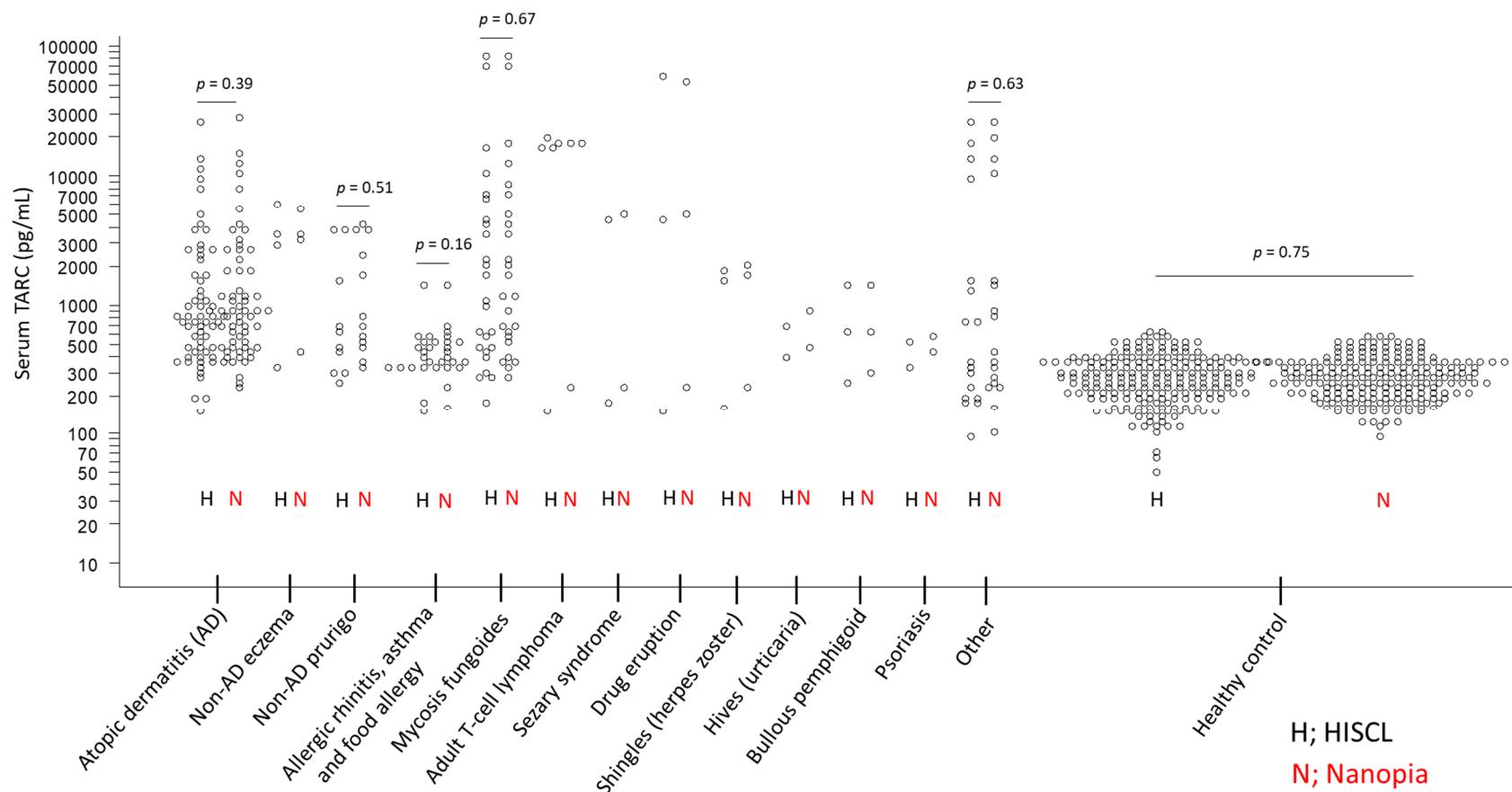


**Figure S1.** A novel latex turbidimetric immunoassay, “Nanopia TARC.”

In this homogeneous assay, anti-human TARC mouse monoclonal antibody-sensitized latex is reacted with thymus and activation-regulated chemokine (TARC), and the absorbance is measured directly without separating the bound/free (B/F) molecules. It can be loaded onto a general clinical chemistry analyzer and provides results in 10 min.



**Figure S2.** Distribution of the thymus and activation-regulated chemokine (TARC) levels measured for allergic and skin diseases.

Dot plots show the distribution of TARC values determined using the two methods (N in red: Nanopia TARC; H in black: HISCL TARC). The Y-axis shows logarithms of serum TARC levels and the X-axis shows the different diseases. The *p* value represents the difference between the two methods in diseases with 10 or more cases (Mann–Whitney *U* test; significance level set at *p* < 0.001).

**Table S1.** Measurement conditions prescribed in the manufacturer's protocol for LABOSPECT008α.

Principle	Absorption spectroscopy
Method	2-point end assay
Reaction time	10 min
1 <sup>st</sup> photometry	5.8 min
2 <sup>nd</sup> photometry	10 min
Photometric wavelength (main-/sub-)	570/800 nm
Sample volume	2.0 µL
1 <sup>st</sup> reagent volume	100 µL
2 <sup>nd</sup> reagent volume	33 µL
Washing reagent	HICARRYNON (Citric acid monohydrate <10%, oxyethylene = alkyl ether 5%)
Calibration curve	Multi-point spline curve