

The German Asthma Net: Patients without any T2 biomarker signal are exceedingly rare



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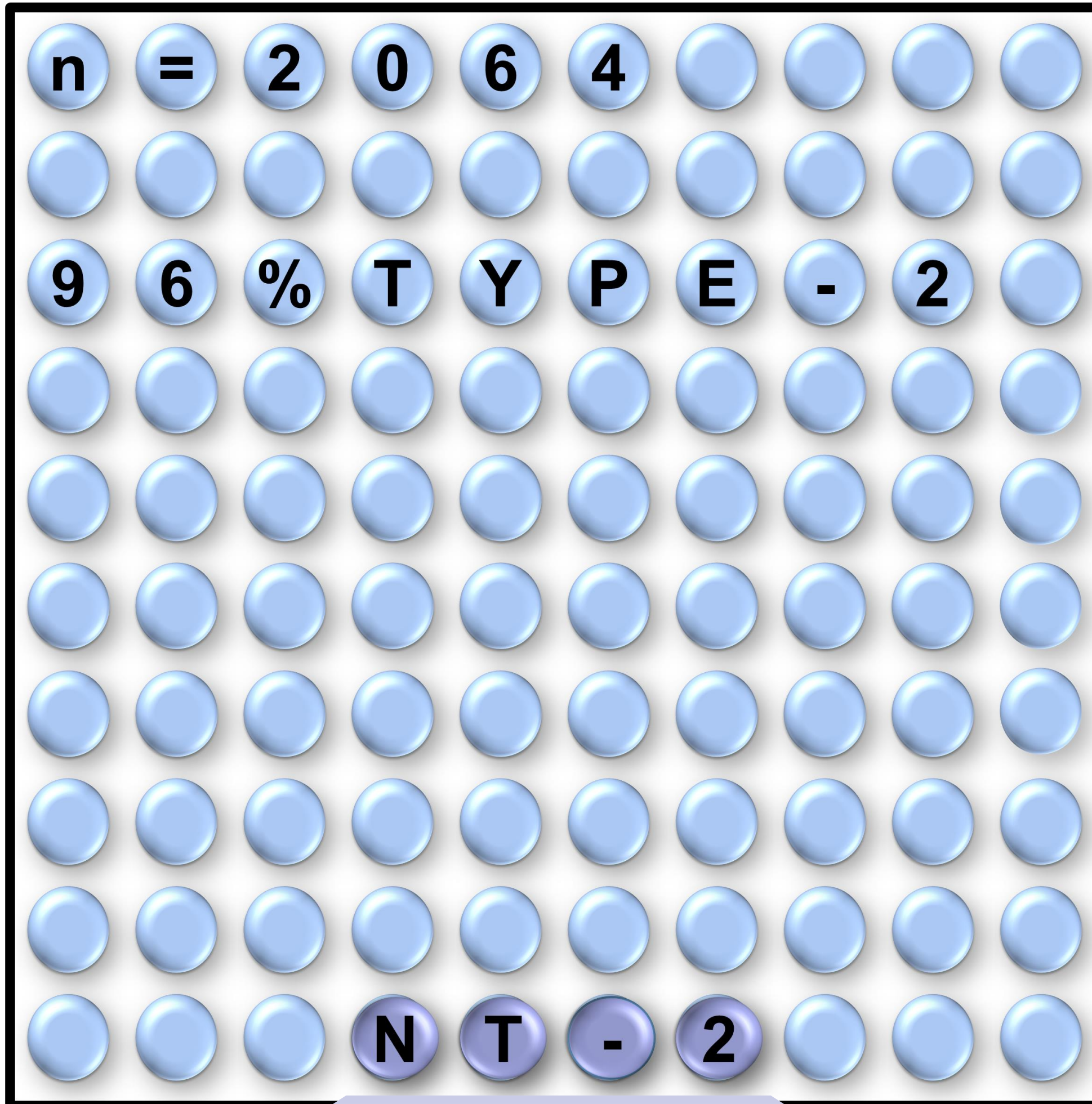
German Asthma Net e.V.



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Introduction:

Severe asthma is a type 2 inflammation (T2) driven disease, in clinical practice measured by FeNO (fraction of exhaled nitric oxide), BEC (blood eosinophil counts), and allergy-triggered symptoms. However, clinical studies also show a **type-2-low (NT2) endo-type** of unclear relevance.



Methods:

This longitudinal study assesses NT2 in the German Asthma Net (GAN) an international, multi-centre, real-life severe asthma registry through Kruskal-Wallis and Chi² tests.

- NT2 = ERS/ATS- and ERS task-force-defined:**
- ✓ FeNO < 40 ppb
 - ✓ BEC < 300/μL
 - ✓ no allergic or mixed asthma phenotype in patients without OCS
- No reduction of OCS/ICS was performed to assess T2-status*

Who are the **severe asthma** patients with **no type 2** signal?

n=49

Systemic corticosteroid dependent

n=21

Historical T2 values

n=14 started targeted treatment

46% high FeNO
69% high BEC

n=19

NT2

Conclusion:
40 of 2064 severe asthma patients had no current T2 signature, with more than half presenting T2 markers at other time points.

The **40 NT2** patients had **less total IgE** (p=0.001), **higher age** (p=0.012), and **more LAMA** use (76% vs 58%, p=0.035).

Similar lung function, asthma control, quality of life, chronic rhinosinusitis, and reflux (p>0.05).