



Probiotics for prevention of asthma

- Targets for microbial manipulation of the gut microbiome

Background

It is estimated that Asthma affects more than 300 mio. people worldwide. Our recent study suggests that the development of persistent asthma (especially allergic asthma) may be mediated through a skewed maturation of the gut microbiome in the first year of life (J. Stokholm *et al.* Nature Communications 2018).

The invention

We found that children, who later developed asthma, had a lower abundance of multiple key bacterial taxa at age one year compared to healthy children. These taxa are candidates for microbial manipulation in early life, perhaps particularly in children born to mothers with asthma, as the risk was dramatically reduced especially in these high risk children. These differences may be used for diagnostic or prophylactic intervention of asthma.

Key selling points

- Novel approach for asthma prevention
- Possibly also applicable to allergy, or other wheezing disorders
- Large market
- Unmet need

Development status

Microbiome analysis have identified several bacterial species, which individually or in combination may serve as targets for microbial manipulation in children of asthmatic mothers.

Intellectual property rights

Patent application filed