Therapies that were used in past

**Immunoadsorption**

Immunoadsorption (IA) has been used in patients with AE and elevated total IgE levels based on the assumption that a reduction in IgE might result in disease improvement. Immunoadsorption was reviewed in the previous AE guidelines, but it is expected to be scarcely used in the future, as multiple newer effective and safe treatments are available.

**Mast cell stabilizers**

Mast cell stabilizers block mast cell degranulation preventing the release of histamine and related mediators. Mast cell stabilizers were reviewed in the previous AE guidelines, but they are expected to be scarcely used in the future, as multiple newer effective and safe treatments are available.

**Intravenous immunoglobulin**

Intravenous immunoglobulin (IVIG) provides immunomodulatory therapy in inflammatory and autoimmune diseases. IVIG was reviewed in the previous AE guidelines, but it is expected to be scarcely used in the future, as multiple newer effective and safe treatments are available.

**Leukotriene antagonists**

Montelukast is a cysteinyl leukotriene receptor antagonist that blocks the action of LTD4, LTC4 and LTE4. Montelucast was reviewed in the previous AE guidelines but it is expected to be scarcely used in the future, as multiple newer effective and safe treatments are available.

**Apremilast**

Apremilast is a small molecule phosphodiesterase (PDE) 4 inhibitor that has been approved for the treatment of psoriasis arthritis and moderate-to-severe plaques psoriasis. Apremilast was reviewed in the previous AE guidelines but it is expected to be scarcely used in the future, as multiple newer effective and safe treatments are available. The apremilast clinical program in the treatment of AE has been discontinued.