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Review [Autoimmun Rev. 2018 Dec;17\(12\):1259-1264. doi: 10.1016/j.autrev.2018.07.003.](#)

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## **Autoinflammatory/autoimmunity syndrome induced by adjuvants (ASIA; Shoenfeld's syndrome): A new flame**

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### **Abstract**

In the present review, recent findings regarding autoimmune/inflammatory syndrome by adjuvants (ASIA) are described. Patients with ASIA present with complaints such as fatigue, cognitive impairment, arthralgias, myalgias, pyrexia, dry eyes and dry mouth. During the last few years, it has been postulated that these symptoms in patients with foreign body implants are due to a chronic inflammatory process and an adjuvant effect of the implanted biomaterial. Ultimately, these inflammatory reactions result in (an increase of) allergies, autoimmune diseases, immune deficiency and/or lymphomas. Pre-existent allergic disease has been found to be an important risk factor for the development of ASIA after foreign body implantation. Explantation of the foreign body results in the majority of patients in an amelioration of the symptoms. There is an urgent need to start adequately

adjusted epidemiological studies to obtain better evidence which percentage of patients does develop symptoms and/or diseases such as ASIA, immune deficiency, and/or autoimmune diseases after implant surgery.

**Keywords:** ALCL - Anaplastic large cell lymphoma; ASIA- autoimmune/inflammatory syndrome by adjuvants; Explantation; Immune deficiency; Mesh implants; Silicone breast implants.

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