



THE AMERICAN SOCIETY FOR AESTHETIC PLASTIC SURGERY, INC.

Breast Implant Associated Anaplastic Large Cell Lymphoma (BIA-ALCL) By the numbers, and what they mean

On March 21, 2017, the U.S. Food and Drug Administration (FDA) released a safety communication updating the current understanding of BIA-ALCL. A joint response statement from ASAPS/ASPS was released, however many members have expressed confusion over much of the data surrounding BIA-ALCL. The purpose of this document is to discuss and bring clarity to some of the figures surrounding this rare disease.

359 The recent BIA-ALCL update reported that the FDA has been made aware of 359 medical device reports (MDRs) related to breast implants and ALCL. This is in comparison to 258 MDRs in January 2016 and 64 MDRs in January 2011. MDRs may be reported by patients, physicians, or manufacturers. It's important to note the MDRs are not individual cases as there are duplicate reports as well as unconfirmed cases suspicious for ALCL within the MDRs. The FDA describes the MDRs in their MAUDE database as "unconfirmed, inaccurate, and biased" and therefore this data should not be taken as the definitive number of cases.

28 The recent FDA update of 359 patients included 28 (7%) smooth implant reports. This is similar to last year's update of 258 patients which included 11 (4%) smooth implant reports. However, none of these reports have a detailed clinical implant history and are therefore still unreliable as a smooth case. To date, no pure smooth implant case of BIA-ALCL has ever been reported in any series with a detailed history. Within the PROFILE registry, there is a single case of a textured tissue expander followed by a smooth implant developing BIA-ALCL. The FDA confirmed that BIA-ALCL is predominantly a texturing issue.

9 The FDA reports 9 deaths reported in the MDRs. These are part of the 12 known deaths worldwide from BIA-ALCL. Two patients died from stem cell transplants, one died from development of a second unrelated lymphoma, and 9 patients died from direct extension of the cancer into their chest wall ultimately expiring from respiratory failure. Of the deaths, none of them received complete surgical excision at any point in their clinical history, none received targeted therapy, and most were significantly delayed in diagnosis or receiving any treatment (1-2 years from onset of symptoms).

126 126 confirmed unique patients have been reported to the PROFILE registry (www.thepsf.org/PROFILE). The PROFILE registry is a joint collaboration between the FDA and ASPS to prospectively track BIA-ALCL patients.

1:30,000 The current lifetime estimated risk of BIA-ALCL in the U.S. is estimated to be 1:30,000 women with textured implants based upon current confirmed cases and textured implant sales data over the past two decades. This is consistent with risk reported in Europe. Certain geographic locations have demonstrated variable risks. For instance, a December 2016 update from the Therapeutic Goods Administration of Australia and New Zealand reported a risk of 1:1000 to 1:10,000 for textured implants. In contrast, there are no Asian BIA-ALCL patients either within Southeast Asia or within the U.S. of Asian

descent. These discrepancies may represent variable reporting or may represent geographic and genetic predisposition which is under investigation.

139 There are currently 139 individual case reports or case series of patients in the literature.

1400 There are 1400 patients a year diagnosed with ALCL. ALCL is a family of diseases from the very aggressive systemic ALCL to the indolent lymphoproliferative disorder primary cutaneous ALCL. For the first time in 2016, the World Health Organization added BIA-ALCL as a provisionally recognized lymphoma to the family of existing ALCL. It is important to differentiate BIA-ALCL from primary lymphoma of the breast which is predominantly a B-cell lymphoma with an incidence of approximately 1:4 million.

12.7% Approximately 550,000 total breast implants are placed per year in the U.S. Of these, approximately 70,000 textured breast implants are placed representing 12.7% of the market. The FDA data suggests that BIA-ALCL is predominantly a texturing issue.

<https://www.ncbi.nlm.nih.gov/m/pubmed/28157769/>

93% 93% of patients are disease free at 3 years follow up which is an excellent prognosis when treated appropriately. The National Comprehensive Cancer Network defines optimal treatment which is total capsulectomy and implant removal for the majority of patients with disease confined to the capsule (35% of patients) or a resectable mass (40% of patients). Advanced disease with lymph node metastasis (14% of patients) or organ metastasis (1% of patients) may require further treatment with chemotherapy using either CHOP anthracycline based-protocol or targeted therapy with brentuximab vedotin. Radiation therapy is only reserved for local unresectable disease such as into the chest wall and mediastinum.