

# Trans-continental survey on allergen immunotherapy in patients with cancer in remission or stable cancer under treatment

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**Background:** Little data exists on allergen immunotherapy (AIT) in patients with cancer in remission (CaREM) or cancer in stable stage, but still under treatment (CaTx). As this issue cannot be addressed in a controlled trial, the experience of practicing allergists might yield useful information.

**Methods:** A survey (SurveyMonkey®) was sent out to all AAAAI members in and outside US to explore their experience with AIT in patients with underlying medical conditions. Respondents were asked how many patients they had treated with AIT and CaREM or CaTx. In the second part of the survey respondents were asked if they had ran into any specific problems.

**Minor problems** were defined as “some dose-reduction or doses postponed, but no major problems. AIT could be continued”

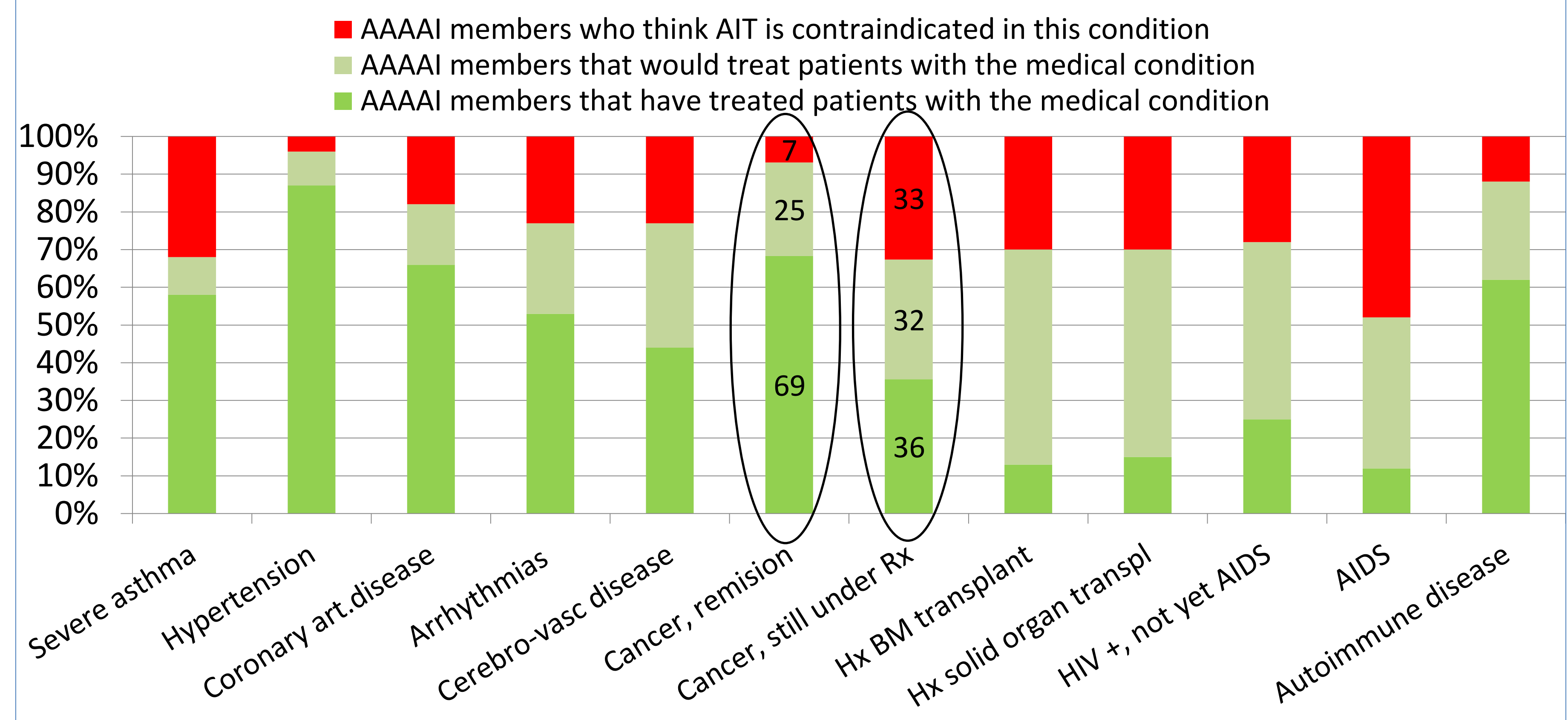
**Major problems** were defined as “activation of underlying disease and/or AIT not well tolerated (systemic adverse events) and/or AIT discontinued for medical reasons”.

Results are expressed descriptively. Pearson’s Chi squared tests were applied to compare the replies between different practice settings. If necessary, Yates’ correction was applied to the Chi squared tests.

**Results 1:** 1061 of the 5148 (20.6%) surveys were sent back. 86% is US-based, 14% foreign.

Practice setting: 44% Urban, 51% Suburban, 5% Rural.  
Academic: 31% Yes, 69% No  
Experience: 21% ≤ 5 years, 11% 11-15 years, 14% 6-10 years, 54% more than 16 years  
Practice size: 30.3% small practice (less than 100 pts), 42.4% medium (100-400pts), 27.4% large practice (more than 400 pts)

**Fig 1** % of responders that has treated, would treat or believes below conditions are contra-indication for Allergen Immunotherapy



**Results Patients with history of cancer:**

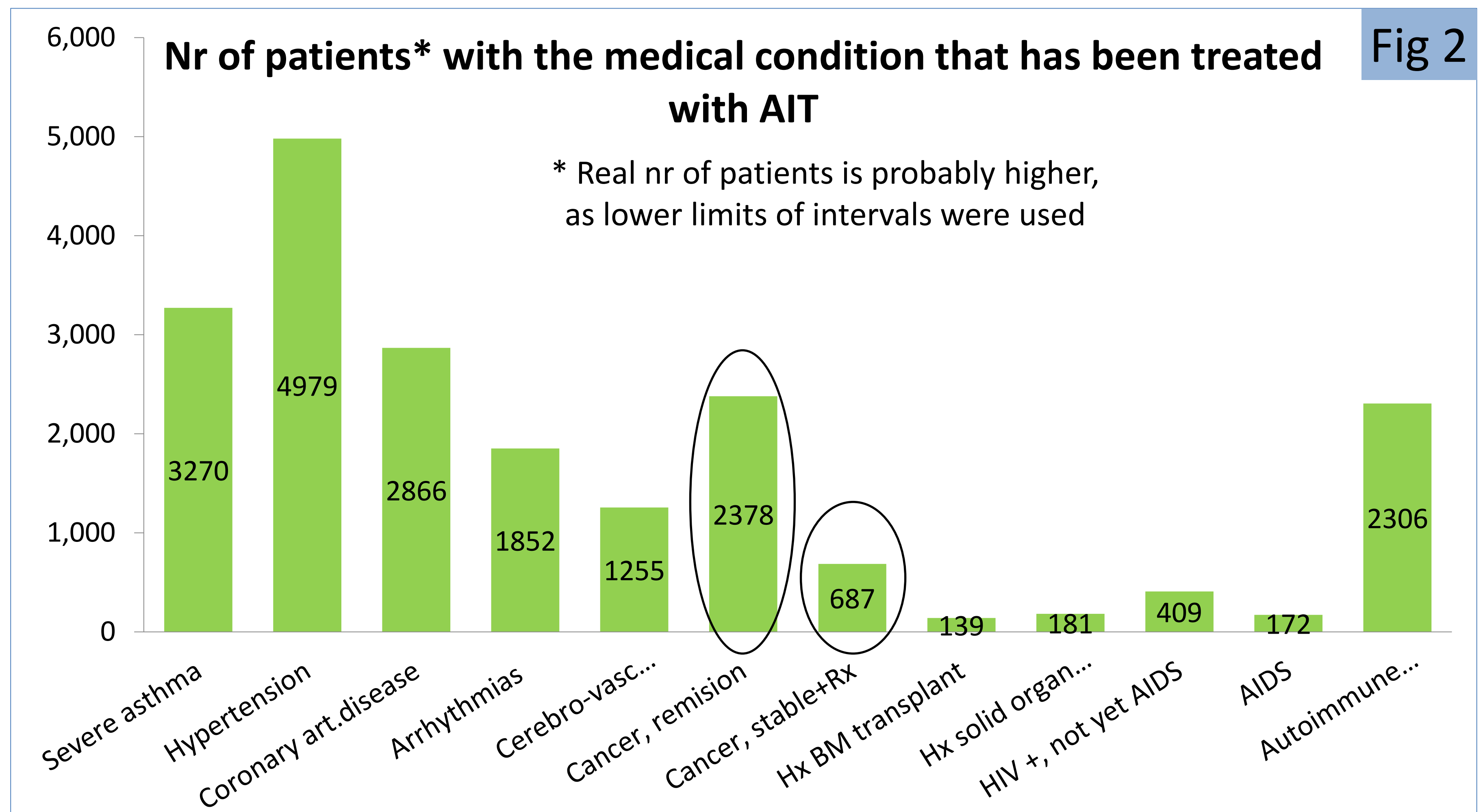
Figure 1 depicts specific medical conditions and the percentages of responders who have treated/would treat/contraindicates AIT in patients with this kind of condition. 671/963 (69%) responding experts have administered AIT in CaREM patients.

Figure 2 shows the number of patients with a certain underlying disorder actually treated with AIT. 146/681 (21%) report experience with >10 patients in their clinics,

Figure 3: 91% of responding allergists found no special problems, 8% minor and 0.2% major problems.

Table 1 shows the nr of physicians that have treated patients according to type of cancer.

**Fig 2** Nr of patients\* with the medical condition that has been treated with AIT



**Results: Patients with cancer, stable, but still under treatment:**

Fig 1: 346/976 (36%) responding experts have experience with AIT in CaTx patients, 32% have no experience but would treat, while 33% considers CaTx a contra-indication.

Fig 2: 33/680 (5%) report experience with >10 patients in their clinics, adding up to a total of over 700 CaTx patients treated. 83% of respondents found no special problems, 15% minor and 2.1% major problem; 4US, and 1EU allergists, reporting problems with a melanoma/GI-tract/kidney malignancies, breast Ca on chemotherapy (problems not specified). One physician reported possible increased growth of a desmoid tumour.

**Results: Sub-group analysis**

**Patients with a history of cancer:** IT is more often contra-indicated in academic centers (p < 0.01) and small centers (p<0.05). Allergists working in academic centers (p<0.0001), in small centers (p<0.0001) and allergists with less years in practice (p<0.0001) have less experience. Allergists in large centers (p<0.0001) and with more years of practice (p<0.0001) have more experience with IT in these patients.

**Patients with cancer, stable, still under treatment:** results are almost identical as above.

**Conclusion:** our data show a vast experience of AIT in CaREM and CaTx patients. It should be re-considered if CaREM is a contra-indication for AIT.

**Nr of respondents mentioning they have administered Allergen Immunotherapy to patients with ...**

Malignancy	History of cancer	Cancer, stable, under treatment
Breast cancer	316	102
Prostate	115	36
Colon	77	19
Lymphoma/NHL	70	18
Skin*	60	9
Leukemia	48	13
Lung	33	15
Melanoma	23	11
Thyroid	19	2
Ovarian	17	3
Renal/kidney	14	3
Many types of Ca**	12	9

Experience of those respondents giving AIT to patients with certain medical condition: outcome (nr.of physicians)

