**Table S1: Overview of the recorded data points for 337 patients with 356 nodules. This includes the learning curve patients of each center.**

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Frequency / Averages** | **Missing** |
| Nodules per center |  | 0 |
| RST | 213 (59.8%) |  |
| VUMC | 84 (23.6%) |  |
| ZGT | 59 (16.6%) |  |
| Operators per center |  | 0 |
| RST | 4 |  |
| VUMC | 3 |  |
| ZGT | 2 |  |
| Gender |  | 0 |
| Female | 308 (91.4%) |  |
| Male | 29 (8.6%) |  |
| Age (years) | 51.5 (±12.3) | 0 |
| Complaints |  | 40 |
| Mechanical | 298 (83.7%) |  |
| Cosmetic | 65 (18.3%) |  |
| Pre-ablation nodule volume (mL) | Median: 12.2 (IQR 6.9-22.4) | 0 |
| Pre-ablation nodule volume group |  | 0 |
| Very-small | 15 (4.2%) |  |
| Small | 128 (36.0%) |  |
| Medium | 156 (43.8%) |  |
| Large | 45 (12.6%) |  |
| Very-large | 12 (3.4%) |  |
| Multinodular goiter |  | 0 |
| Yes | 247 (69.4%) |  |
| No | 109 (30.6%) |  |
| TIRADS score |  | 157 |
| 1 | 17 (8.5%) |  |
| 2 | 76 (38.2%) |  |
| 3 | 60 (30.2%) |  |
| 4 | 40 (20.1%) |  |
| 5 | 6 (3.0%) |  |
| Laterality of the nodule |  | 0 |
| Left lobe | 138 (38.8%) |  |
| Isthmus | 30 (8.4%) |  |
| Right lobe | 188 (52.8%) |  |
| Location of the nodule |  | 230 |
| North pole | 12 (9.5%) |  |
| Middle pole | 80 (63.5%) |  |
| South pole | 34 (27.0%) |  |
| Composition nodule |  | 0 |
| Solid | 116 (32.6%) |  |
| Predominantly solid | 215 (60.4%) |  |
| Predominantly cystic | 25 (7.0%) |  |
| Cystic | 0 (0%) |  |
| Echogenicity |  | 172 |
| Hyperechoic | 22 (12.0%) |  |
| Isoechoic | 138 (75.0%) |  |
| Hypoechoic | 24 (13.0%) |  |
| Calcifications |  | 128 |
| No | 190 (83.3%) |  |
| Micro | 8 (3.5%) |  |
| Macro | 26 (11.4%) |  |
| Egg-shell | 4 (1.8%) |  |
| Vascularity |  | 273 |
| Avascular | 19 (22.9%) |  |
| Hypovascular | 18 (21.7%) |  |
| Isovascular | 12 (14.5%) |  |
| Hypervascular | 34 (41.0%) |  |
| TSH (mU/L) | Median: 0.94 (IQR 0.49-1.7) | 10 |
| FT4 (pmol/L) | Median: 16.0 (IQR 14.0-18.0) | 46 |
| Ablation time (min) | 15.3 (± 8.4) | 28 |
| Power used (W) | Median 40 (IQR 35-42.5) | 92 |
| Energy applied (kJ) | 30.0 (± 18.4) | 30 |
| Energy applied (kCal) | 7.2 (±4.4) | 30 |
| Energy applied per mL (kJ/mL) | Median: 2.20 (1.47-3.15) | 30 |
| Energy applied per mL (kCal/mL) | Median: 0.53 (0.35-0.75) | 30 |
| Energy applied per volume success rate | 173 (53.1%) | 30 |
| In cystic nodules, component aspirated | 35 (14.5%) | 115 |
| Volume aspirated component (mL) | Median: 5.0 (IQR 4.0-10.0) | 13 |
| Volume at 3 months (mL) | Median: 5.4 (IQR 2.7-9.9) | 32 |
| VRR at 3 months (%) | Median: 55.9 (IQR 44.1-66.0) | 32 |
| Technical success at 3 months | 207 (58.1%) | 32 |
| Volume at 6 months (mL) | Median: 4.5 (IQR 2.1 – 8.7) | 27 |
| VRR at 6 months (%) | Median: 65.1 (IQR 52.3 – 74.7) | 27 |
| Technical success at 6 months | 261 (73.3%) | 27 |
| Volume at 12 months (mL) | Median: 3.7 (IQR 1.6 – 7.7) | 14 |
| VRR at 12 months (%) | Median: 70.5 (IQR 57.8%-80.9%) | 14 |
| Technical success at 12 months | 283 (79.5%) | 14 |
| VRR at last available follow-up in 42 patient with additional follow-up (%) | Median: 66.9 (IQR 46.0-78.6) | 0 |
| Time after RFA at last available follow-up in 42 patient with additional follow-up (months) | 26.04 (IQR 20.8-37.5) | 0 |
| Mechanical complaints at 12 months follow-up |  | 20 |
| No complaints | 212 (69.1%) |  |
| Less complaints | 48 (15.6%) |  |
| No difference or worsening of complaints | 27 (8.8%) |  |
| Cosmetic complaints at 12 months follow-up |  | 7 |
| No complaints | 43 (64.2%) |  |
| Less complaints | 13 (19.4%) |  |
| No difference or worsening of complaints | 4 (6.0%) |  |

If not stated otherwise: Number with % in brackets or mean with SD in brackets.

**Figure S2: Box and whisker plots of the VRR at 12 months per learning curve group per radiologist. An outlier of radiologist 2 in case 0-10 of VRR -68% is not shown.**

