**Table 1:** Clinical study describing patient with radiogenic angiosarcoma (RAS) of the breast treated also with electrochemotherapy (ECT)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **STUDY** | **Type of study**  | **Patients**  | **AGE**  | **History**  | **FIRST TREATMENT**  | **LATENCY PERIOD****months** | **CLINICAL FEATURES** | **SKIN REGION**  | **RE-TREATMENT** | **Histology**  | **C myc amplification**  |
| Cencelj-Arnez 2020[16] | CR  | 1 | 63 | Syncronus bilateral Luminal BC(right breast) | Mastectomy + 6 cicles x 5-fluorouracil, epirubicin, Cyclophosphamide+ letrozole +RT 25Gy | 60  | Ulcerated red lesion | Lower-medial quadrantIn right breast  | Excision + ECT + doxorubicin  | High grade RAS | Yes  |
| Campana 2019[19] | CS | 20(10 breast RAS) | / | / | / | / | / | / | / | / | / |
| Benevento 2015[20] | CR | 1 | 76 | Invasive ductal carcinoma Luminal BC (left breast)pT1 pN0 M0 G2  | BCS +50 Gy in 25 fractions of 200 cGy/daily with boost of 10 Gy in 5 fractions of 200 cGy/daily +Tamoxifene  | 48 | painful, violet, multi-nodular mass  | Left>right breast  | Excision +Mastectomy (after 4 years)+ doxorubicin | grade-II RAS | / |
| Guida 2016[20] | RS | 19(6 breast RAS) | 69 | / | / | 96 | / | Scalp (5)Breast (8)Skin (3)Soft tissue (3) | ECT (19/19)+ Surgery (17/19) + RT (5/19) + CT (3/19) | RAS | / |
| Mocerino 2015[26] | CR | 1 | 77 | invasive ductal carcinoma pT1N0M0 ER +15%; PgR +30%; HER2 IHC 1+ (left breast) | BCL + 60 Gy in 30 fractions +tamoxifen  | 84 | ecchymotic lesion (1.3 cm)  | near the scar  | Excision +left mastectomy (after 1 year)+ right mastectomy (after 2 years) + ECT+69 Gy + Doxorubicin  | low-grade RAS | / |
| Laurino 2022[27] | CR | 1 | 61 | infiltrating ductal carcinoma, pT1cN0, grade G2, ER 98%, PGR 20%, HER2+,left breast | BCL +50 Gy in 25 fractions + 10 Gy in 5 fractions by photons+Adjuvant CT +letrozole | 72 | / | Left breast  | Neoadjuvant CT + mastectomy (after 1 year) + ECT+Re-excision | high-grade RAS (G3), positive for Factor VIII and CD31, with extensive areas of necrosis and ulceration. | / |
| Laurino 2022[27] | CR | 1 | 63 | infiltrating ductal breast cancer pT1cN1(1/18), G2, ER: 90%, PGR: 60%, Ki67 index at 15%, and HER2 negativeLeft breast | BCS+5-fluorouracil, epidoxorubicin, and cyclophosphamide+50 Gy in 25 fractions + 10 Gy in 5 fractions by photons+letrozole | 108 | ulcerated and bleeding left breast lump, 7 cm in diameter, adherent to the chest wall | Left breast  | Radiofrequency termoablation +gemcitabine and docetaxel + ECT + | RAS | / |
| Parisi 2023 | CR | 1 | 59 | breast invasive ductal Luminal B carcinomapT1c N0 M0(right breast) | BCL +60 Gy in 30 fractions+femara | 60 | exophytic lump | near the scar  | Excision + right mastectomy +Paclitaxel (doxorubicin contraindicated) + 40.5 Gy in 15 fractions + ECT | Grade II RAS | / |

CR= case report

CS= cohort study

Rs= retrospective study