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Table S1. CaEP-B Biopsy plan. If a patient only had three treatable tumours (or only requested treatment of three tumours), the chart was followed from no. 1-3. CaEP: Calcium electroporation; B: Biopsy, paraffin embedded. (F)/ (B): Biopsy if possible (Day 0: Biopsy if tumour > 2 cm largest diameter); F: Frozen biopsy 2 mm. (F): Biopsy if possible (Day 0: Biopsy if tumour > 2 cm largest diameter). *Note tumour no. in a single patient.

Tumour no.*	Day 0	Day 2	Day 7	Day 28	Day 30	Day 35	Day 60	Day 90
1	(F) + B + CaEP	В					(B)	(B)
2	CaEP	B + F			(F)		(B)	(B)
3	(B) + F + CaEP		В				(B)+(F)	(B)
4	CaEP		F	В	(F)		(B)	(B)
5	CaEP			B + CaEP	В		(B)+(F)	(B)
6	CaEP			CaEP	B+F		(B)	(B)+(F)
7	CaEP			F + CaEP		В	(B)	(B)+(F)
8	CaEP			CaEP			B+F	B+F

Table S2. HER2 and ER expression in samples day 0-90. HER2 expression score (0-3): Normal (0-1), borderline (2), and high (3). NA: Not applicable. ER (oestrogen receptor); HER2 (human epidermal growth factor receptor 2).

	Baseline	Day 2	Day 7	Day 28	Day 60	Day 90
Samples from breast cancer metastases	n = 16	n = 21	n = 6	n = 6	n = 24	n = 20
HER2 expression						
Normal	10 (62%)	16 (80%)	2 (34%)	4 (67%)	20 (84%)	13 (77%)
Borderline	3 (19%)	0 (0%)	0 (0%)	0 (0%)	3 (12%)	3 (18%)
High	3 (19%)	4 (20%)	4 (67%)	2 (33%)	1 (4.2%)	1 (5.9%)
NA (n)	0	1	0	0	0	3
ER expression						
Mean % (range)	10 (0, 40)	0 (0, 0)	0 (0, 4)	0 (0, 4)	1 (0, 35)	0 (0, 30)
NA (n)	1	1	0	0	1	4
Samples from other	n = 5	n = 5	_	_	_	n = 1
cancer metastases	11 – 3	11 – 3	-	_	-	11 – 1
HER2 expression						
Normal	5 (100%)	5 (100%)	-	-	-	1 (100%)
Borderline	0 (0%)	0 (0%)	-	-	-	0 (0%)
High	0 (0%)	0 (0%)	-	-	-	0 (0%)
NA (n)	0	0	-	-	-	0
ER expression						
Mean % (range)	0 (0, 0)	0 (0, 0)	-	-	-	30 (30, 30)
NA (n)	0	0				0

Table S3. Skin tumour related CTCAE v. 4.0 scores at baseline and two months after calcium electroporation.

ADVERSE EVENTS AFTER CALCIUM ELECTROPORATION

1 None	ODOR			Baseline before treatment, n=17		Two months, n = 12	
2		1	None			7	58%
None		2					33%
None		3		3		1	8%
	SKIN INFECTION						
Combined area of ulcers >1 cm, non-blanchable erythema of intact skin with associated warmth or oedema 1 cm, and a cm of size is combined area of ulcers >2 cm, full-thickness skin loss involving damage to or necrosis of subcutaneous fisue that may extend 3 cm, and a cm of size is skin loss. 3 cm of size is skin loss. 3 cm, and a cm of size is skin loss. 3 cm of size is skin loss		0	None	16	94%	12	100%
Combined area of ulcers >1 cm, non-blanchable erythema of intact skin with associated warmth or oedema 1 cm, and a cm of size is combined area of ulcers >2 cm, full-thickness skin loss involving damage to or necrosis of subcutaneous fisue that may extend 3 cm, and a cm of size is skin loss. 3 cm of size is skin loss. 3 cm, and a cm of size is skin loss. 3 cm of size is skin loss		1	Localized; local intervention indicated (e.g., topical antibiotic, antifungal, or antiviral)	0	0%	0	0%
		2		1	6%	0	0%
None		3	Localized; local intervention indicated (e.g., topical antibiotic, antifungal, or antiviral)	0	0%	0	0%
None		4	Life-threatening consequences: urgent intervention indicated	0	0%	0	0%
Mild Moderate pain; limiting instrumental ADL 3 18% 1 1 1 1 1 1 1 1 1	PAIN						
Moderate pain; limiting instrumental ADL Severe pain; limiting instrumental ADL None None None None None None None None		0	None	8	47%	6	50%
Severe pain; limiting self-care ADL None 1 Hyperpigmentation covering <10% BSA; no psychosocial impact 1 Hyperpigmentation covering <10% BSA; associated psychosocial impact 2 Hyperpigmentation covering >10% BSA; associated psychosocial impact 3 None 1 1 = Combined area of ulcers <1 cm; non-blanchable erythema of intact skin with associated warmth or oedema 1 1 = Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat 3 Combined area of ulcers >2 cm; full-thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend 4 Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full thickness skin loss. SUPPURATION None 7 41% 2 1 Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL 3 Severe; hospitalization indicated disabling, limiting self-care ADL 0 0 0% 0 0%		1	Mild	7	41%	4	33%
HYPERPIGMENTATION None		2	Moderate pain; limiting instrumental ADL	3	18%	1	8%
None 17 100% 11 15 16 17 100% 11 15 17 100% 11 15 17 100% 11 15 17 100% 11 15 17 100% 11 15 15 15 15 15 15 1		3	Severe pain; limiting self-care ADL	0	0%	0	0%
Hyperpigmentation covering < 10% BSA; no psychosocial impact Hyperpigmentation covering > 10% BSA; associated psychosocial impact ULCERATION O None 1-Combined area of ulcers < 1 cm; non-blanchable erythema of intact skin with associated warmth or oedema 1 1-Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat 3 18% 3 200 3 18% 3 20 3	HYPERPIGMENTATION						
### Pubmentation covering >10% BSA; associated psychosocial impact ### Pubmentation covering >10% BSA; associated psychosocial impact spychosocial impact		0	None	17	100%	11	92%
None 1 1 (1-Combined area of ulcers < 1 cm; non-blanchable erythema of intact skin with associated warmth or oedema 1 1 6% 1 2 (2 (3 (1 m) sequence) (3 m) sequence) (3 m) sequence) (4 m) sequence) (5 m) sequence) (5 m) sequence) (6 m) sequence) (8 m) seq		1	Hyperpigmentation covering <10% BSA; no psychosocial impact	0	0%	1	8%
None 1 1 1 1 1 1 1 1 1 1		2	Hyperpigmentation covering >10% BSA; associated psychosocial impact	0	0%	0	0%
1 = Combined area of ulcers < 1 cm; non-blanchable erythema of intact skin with associated warmth or oedema 2 Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat 3 18% 3 24 Combined area of ulcers > 2 cm; full-thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to fascia. 4 Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full thickness skin loss. SUPPURATION 0 None 7 41% 2 1 Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL Moderate; minimal intervention indicated disabling, limiting self-care ADL Severe; hospitalization indicated disabling, limiting self-care ADL 1 6% 1 1 6% 1 2 6% 1 2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ULCERATION						
Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat Combined area of ulcers > 2 cm; full-thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to fascia. Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 thickness skin loss. SUPPURATION None None Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL Severe; hospitalization indicated disabling, limiting self-care ADL Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat 3 18% 3 2 4 1% 7 41% 7 5 5 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0	None	5	29%	5	42%
Combined area of ulcers >2 cm; full-thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to fascia. Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full thickness skin loss. SUPPURATION None None None Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL Moderate; hospitalization indicated disabling, limiting self-care ADL Severe; hospitalization indicated disabling, limiting self-care ADL		1		1	6%	1	8%
down to fascia. 4 Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 thickness skin loss. SUPPURATION O None 7 41% 2 1 Mild symptoms: intervention not indicated 6 35% 6 5		2	Combined area of ulcers 1 - 2 cm; partial thickness skin loss involving skin or subcutaneous fat	3	18%	3	25%
Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 thickness skin loss. SUPPURATION None Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL Moderate; hospitalization indicated disabling, limiting self-care ADL Severe; hospitalization indicated disabling, limiting self-care ADL Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 1 6% 1 Moderate; with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full 2 6% 1 Moderate; with extensive destruction and damage to muscle, bone, or supporting structures with or supporting st		3	Combined area of ulcers >2 cm; full-thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend	7	41%	7	58%
thickness skin loss. SUPPURATION O None			down to fascia.				
SUPPURATION None 7 41% 2 1 Mild symptoms: intervention not indicated 6 35% 6 5 Moderate; minimal intervention indicated, limiting age-appropriate ADL 4 24% 4 3 Severe; hospitalization indicated disabling, limiting self-care ADL 0 0% 0		4	Any size ulcer with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full	1	6%	1	8%
0None741%211Mild symptoms: intervention not indicated635%652Moderate; minimal intervention indicated, limiting age-appropriate ADL424%43Severe; hospitalization indicated disabling, limiting self-care ADL00%0			thickness skin loss.				
Mild symptoms: intervention not indicated Moderate; minimal intervention indicated, limiting age-appropriate ADL Severe; hospitalization indicated disabling, limiting self-care ADL O 0% O 0%	SUPPURATION						
2 Moderate; minimal intervention indicated, limiting age-appropriate ADL 4 24% 4 3 3 Severe; hospitalization indicated disabling, limiting self-care ADL 0 0% 0		0		7	41%	2	17%
3 Severe; hospitalization indicated disabling, limiting self-care ADL 0 0% 0		1	Mild symptoms: intervention not indicated	6	35%	6	50%
		2		4	24%	4	33%
4 Life-threatening, disabling 0 0% 0		3	Severe; hospitalization indicated disabling, limiting self-care ADL	0	0%	0	0%
		4	Life-threatening, disabling	0	0%	0	0%