Salivary gland cancers

Resected salivary gland

Radiation or chemoradiation

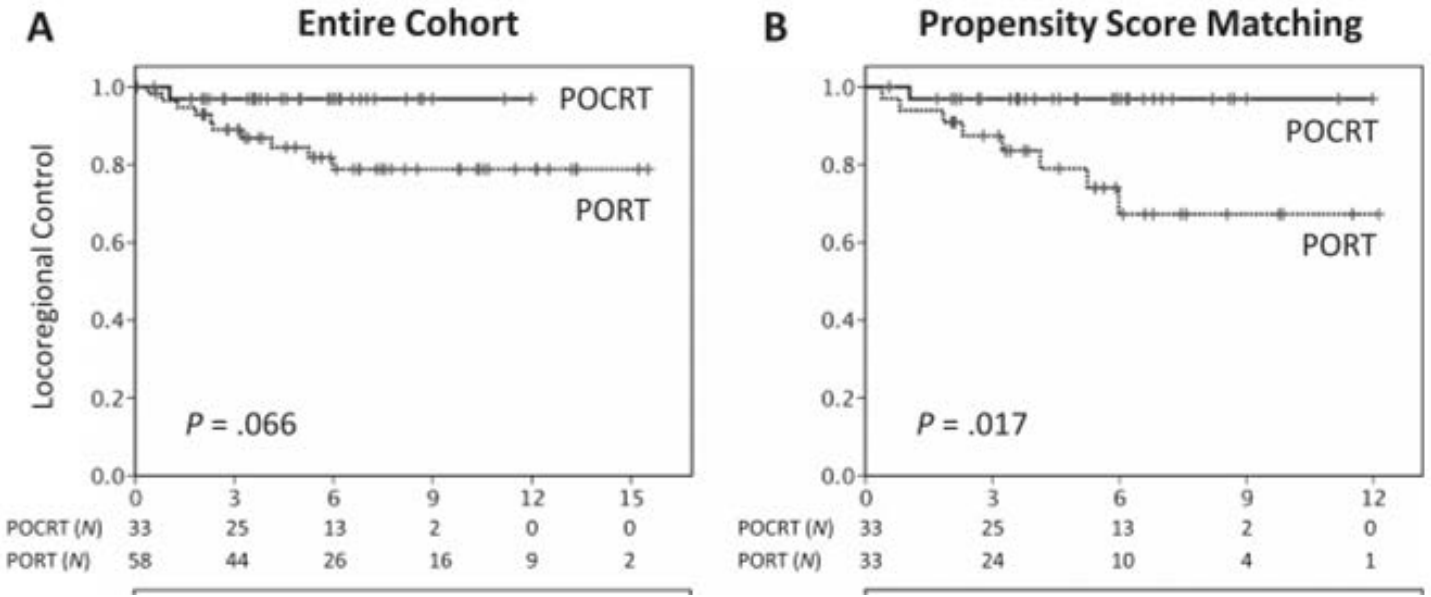
Indication of CTRT

1. T3-4, or N1-3 disease with intermediate or high grade histologies
2. T1-2 N0 patients with positive or close (< = 1mm) microscopic margins of resection with intermediate or high grade histologies

Agent

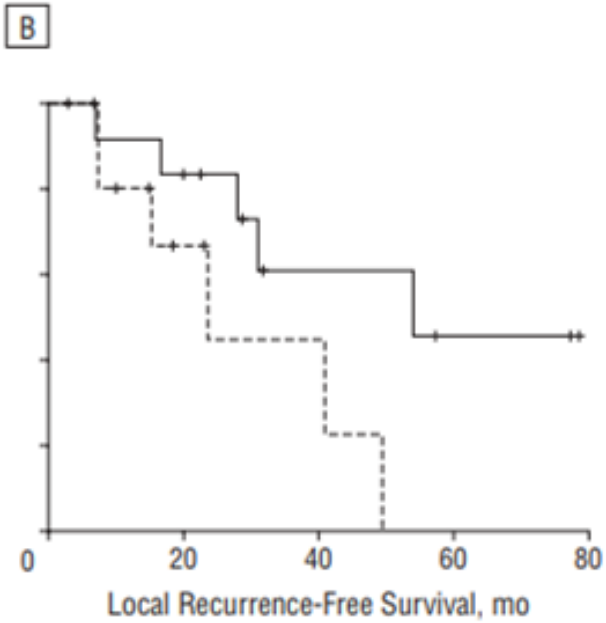
1. Cisplatin-based concurrent regimens were the most commonly used chemotherapy schedules in literature. Patients typically received cisplatin at 100 mg/m2 once every 3 weeks or 40 mg/m2 once per week.
2. In addition cisplatin with 5 FU, weekly carboplatin , paclitaxel-carboplatin weekly have been administered

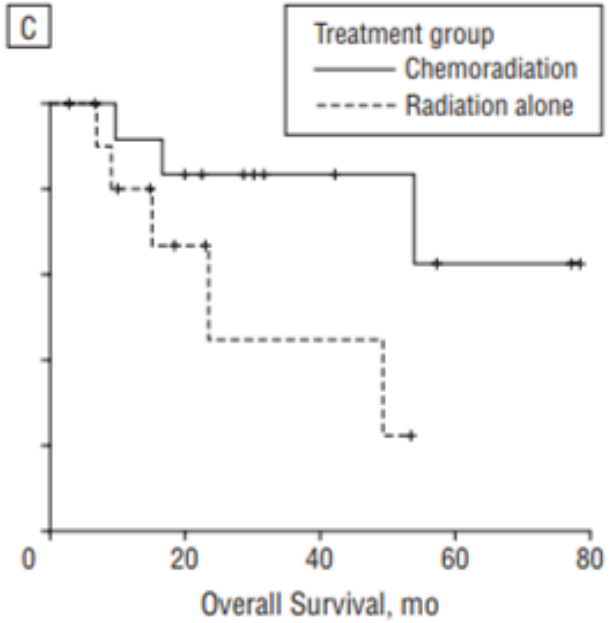
Evidence in favour of CTRT



Hsieh et al. Radiat Oncol. 2016 Mar 22;11:47. doi: 10.1186/s13014-016-0617-7.

Evidence for favour CTRT





Tanvetyanon et al. Arch Otolaryngol Head Neck Surg. 2009

Evidence against CTRT

1. Amni et al
    a. Unadjusted 2-year OS was worse with adjuvant CRT vs RT alone (71.3% vs 80.2%)
2. Mifsud et al
    a. No difference in 3-year progression-free survival (PFS) with the use of CRT versus RT (hazard ratio [HR] = 0.783; 95% confidence interval [CI] = 0.396-1.549; p = .482)

Amini et al. JAMA Otolaryngol Head Neck Surg. 2016 Nov 1;142(11):1100-1110.
Mifsud et al. Head Neck. 2016 Nov;38(11):1628-1633.

Why this difference?

1. In general these are retrospective studies
2. Patients with poor prognostic factor received CTRT
3. If no matching done than results would be negative
4. Trials which are positive : Matched by propensity analysis
5. In negative trials, the mismatch is high

Characteristic	No. (%) of Patients[a] RT Alone (n = 1842)	CRT (n = 368)	P Value[b]
Histologic type			
Mucoepidermoid carcinoma	898 (48.8)	134 (36.4)	
Adenoid cystic carcinoma	131 (7.1)	14 (3.8)	
Adenocarcinoma	676 (36.7)	167 (45.4)	<.001
Salivary duct carcinoma	66 (3.6)	40 (10.9)	
Acinic cell carcinoma	71 (3.9)	13 (3.5)	
Tumor grade			
2	484 (26.3)	47 (12.8)	<.001
3	1358 (73.7)	321 (87.2)	
Tumor stage			
T1	323 (17.5)	35 (9.5)	
T2	424 (23.0)	67 (18.2)	
T3	563 (30.6)	110 (29.9)	<.001
T4	521 (28.3)	151 (41.0)	
Unknown	11 (0.6)	5 (1.4)	
Nodal stage			
N0	892 (48.4)	70 (19.0)	
N1	347 (18.8)	61 (16.6)	
N2	581 (31.5)	233 (63.3)	<.001
N3	5 (0.3)	2 (0.5)	
Unknown	17 (0.9)	2 (0.5)	

Amini et al. JAMA Otolaryngol Head Neck Surg. 2016 Nov 1;142(11):1100-1110.

Clinicopathologic variables	No. of patients: CRT N = 37	No. of patients: RT N = 103	p value*
Age, y			.535
Range	37–83	13–88	
Median	60	61	
Sex			.25
Female	15 (40.5%)	55 (53.4%)	
Male	22 (59.5%)	48 (46.6%)	
Primary site			.07
Major	29 (78.4%)	62 (60.2%)	
Minor	8 (21.6%)	41 (39.8%)	
T classification			.064
T1	6 (16.2%)	32 (31.1%)	
T2	5 (13.5%)	24 (23.3%)	
T3	11 (29.7%)	24 (23.3%)	
T4	15 (40.5%)	23 (22.3%)	
N classification			< .001*
N0	13 (35.1%)	83 (80.6%)	
N1	5 (13.5%)	6 (5.8%)	
N2	19 (51.4%)	14 (13.6%)	
Tumor histology			.018*
Acinic cell carcinoma	0	12 (11.7%)	
Adenocarcinoma†	6 (16.2%)	23 (22.3%)	
Adenoid cystic carcinoma	13 (35.1%)	30 (29.1%)	
Mucoepidermoid carcinoma	9 (24.3%)	27 (26.2%)	
Salivary duct carcinoma	9 (24.3%)	8 (7.8%)	
Other carcinomas‡	0	8 (7.8%)	
Tumor grade			.001*
Low	4 (10.8%)	30 (29.1%)	
Intermediate	2 (5.4%)	27 (26.2%)	
High	27 (73%)	38 (36.9%)	
Margin status			< .001*
Negative	5 (13.5%)	41 (39.8%)	
Close	3 (8.1%)	20 (19.4%)	
Positive	29 (78.4%)	42 (40.8%)	
PNI			.004*
No	5 (13.5%)	44 (42.7%)	
Yes	31 (83.8%)	55 (53.4%)	
LVSI			.133
No	21 (56.8%)	76 (73.8%)	
Yes	14 (37.8%)	22 (21.4%)	

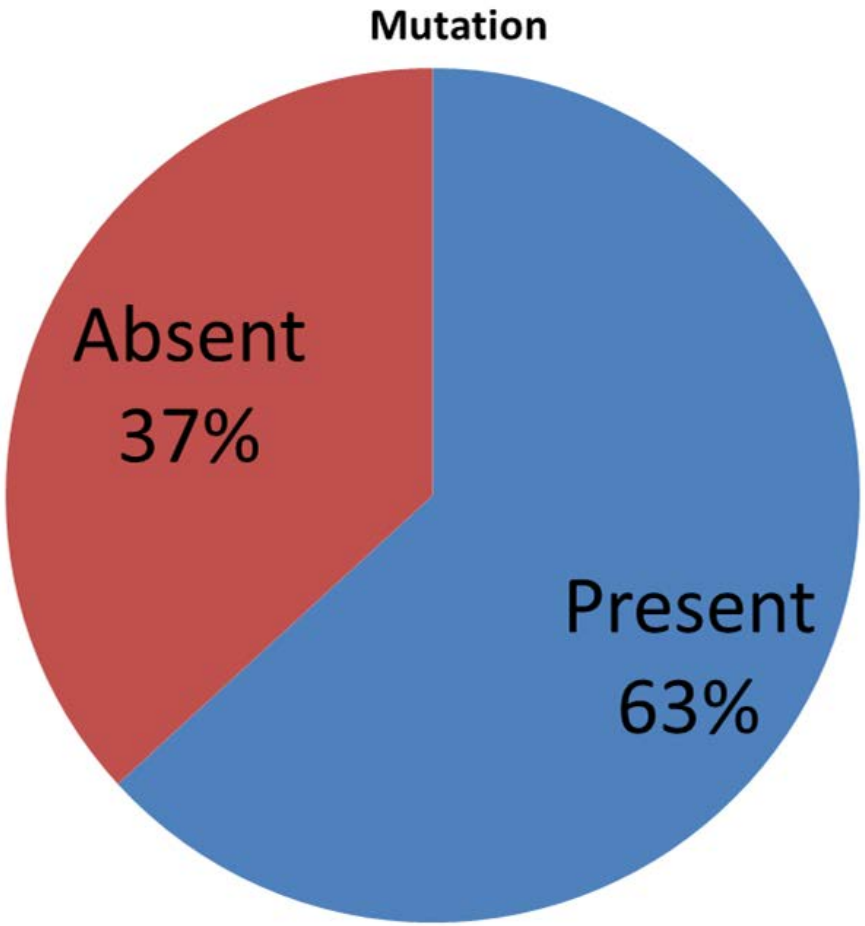
Palliative therapies

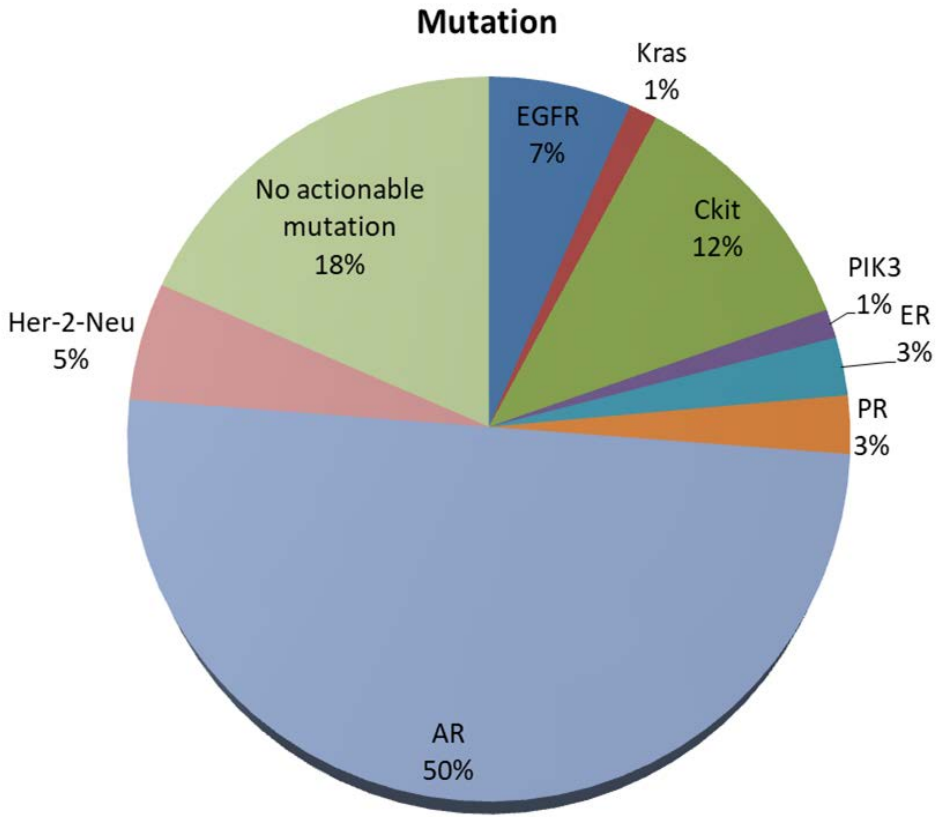
Histological subtype	Her-2	EGFR	c-Kit	AR	ER	PR
Adenoid cystic	R	V	C (80%)	R	R	R
Adenocarcinoma	UC (20-25%)	UC (10-25%)	V	UC (10-20%)	R	R
Mucoepidermoid	UC (25-30%)	C (35-40%)	R	R	R	R
Salivary duct	C (>50%)	C (40%)	R	C (40-50%)	R	R
Response rate	100%	-	67% SD + Cisplatin	50-65%	-	-

AR-Androgen receptor, ER-Estrogen receptor, PR-Progesterone receptor, R-rare, UC-Uncommon, C-Common, V-Variable.
Table 1: Biomarker distribution in salivary gland tumors

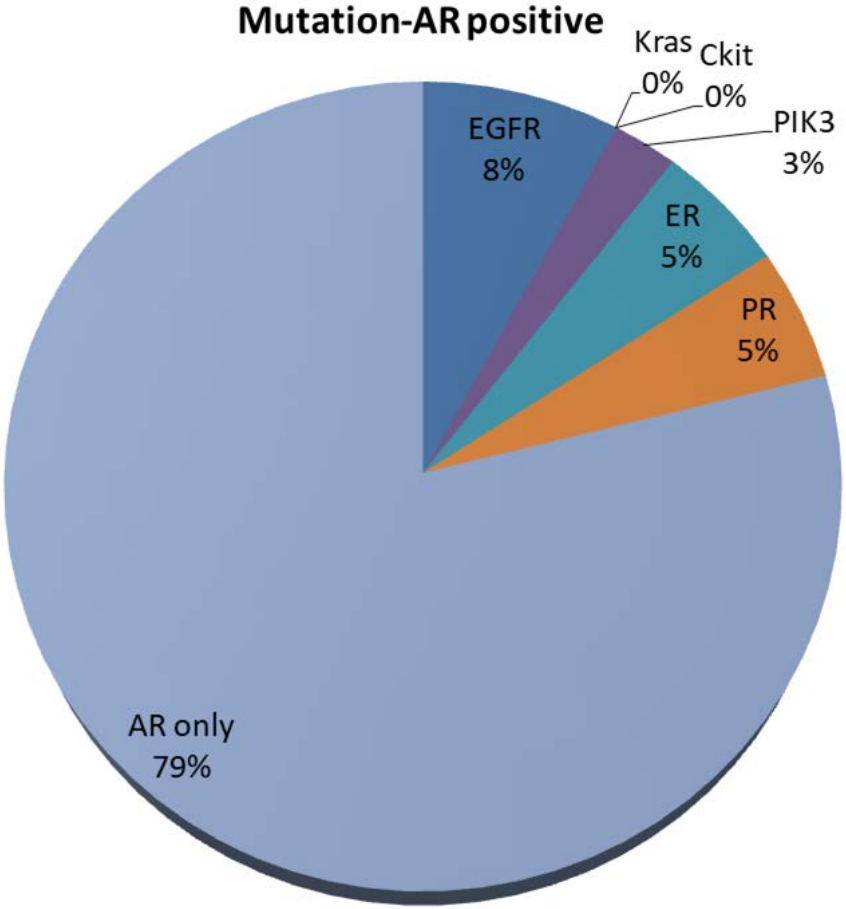
Dalin et al. Cancers (Basel). 2017 Feb 8;9(2). pii: E17
Limaye et al.Oncologist. 2013;18(3):294-300..

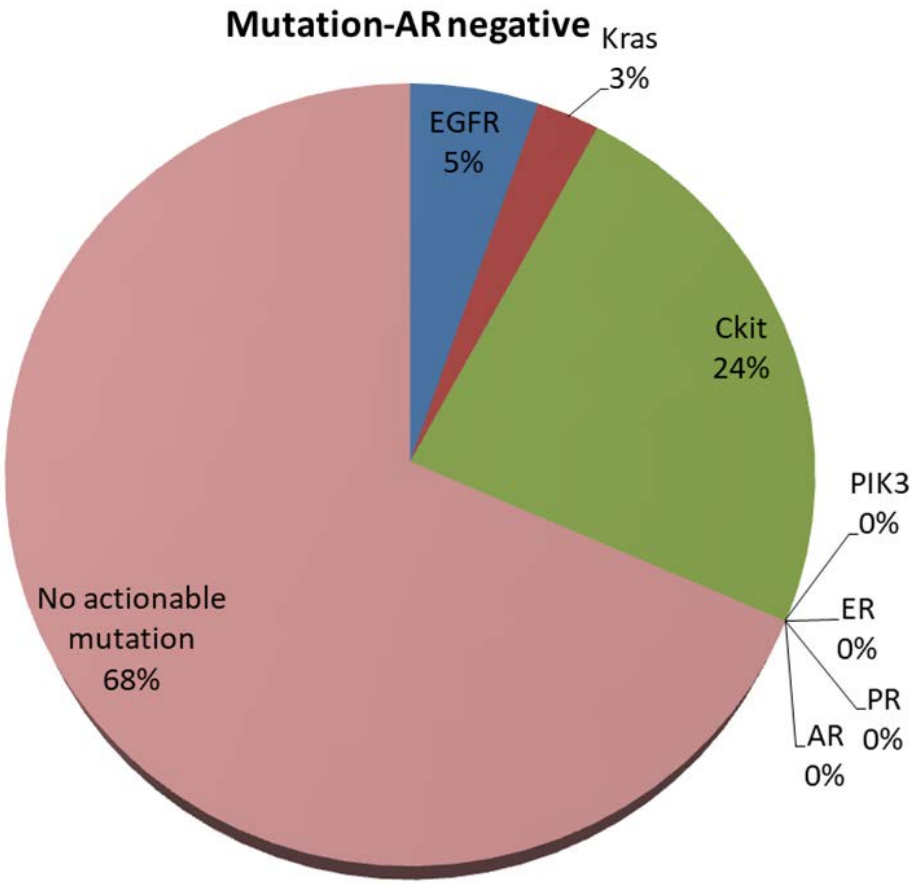
Regimen	Histology	Response rate
Cisplatin	ACC, MEC and ADC	Upfront : 16-21%, Recurrent : 7-18%
Mitoxantrone	ACC	12.5%
Epirubicin	ACC	10%
Paclitaxel	MEC and ADC	21-29%
Docetaxel	MEC	100%
Cyclophosphamide/Doxorubicin/Cisplatin	ACC, MEC and ADC	46%
Cisplatin/Doxorubicin/5FU	ACC, MEC and ADC	35%
Cyclophosphamide/Doxorubicin/Cisplatin/5FU	ACC, MEC and ADC	50%
Cisplatin/Epirubicin/5FU	ACC and ADC	29%
Cisplatin/5FU	ACC	0%
Carboplatin/Paclitaxel	ACC	20%





UNPUBLISHED DATA-TMH





UNPUBLISHED DATA-TMH

Histological subtype	Her-2	EGFR	c-Kit	AR	ER	PR
Adenoid cystic	R	V	C (80%)	R	R	R
Adenocarcinoma	UC (20-25%)	UC (10-25%)	V	UC (10-20%)	R	R
Mucoepidermoid	UC (25-30%)	C (35-40%)	R	R	R	R
Salivary duct	C (>50%)	C (40%)	R	C (40-50%)	R	R

AR-Androgen receptor, ER-Estrogen receptor, PR-Progesterone receptor, R-rare, UC-Uncommon, C-Common, V-Variable.
Table 1: Biomarker distribution in salivary gland tumors

Dalin et al. Cancers (Basel). 2017 Feb 8;9(2). pii: E17
Limaye et al.Oncologist. 2013;18(3):294-300..

Histological subtype	Her-2	EGFR	c-Kit	PIK3	**AR**	ER	PR	Negative
Adenoid cystic-no(%)	-	3 (7.7)*	8 (20.5)	1 (2.6)	**12 (30.8)**	3 (7.7)	3 (7.7)	16 (41)
Adenocarcinoma-no(%)	3 (16.7)	2 (11.1)**	2 (11.1)	-	**6 (33.3)**	-	-	10 (55.6)
Mucoepidermoid-no(%)	-	-	-	-	**1 (25)**	-	-	3 (75)
Salivary duct-no(%)	1 (50)	-	-	-	**2 (100)**	-	-	-
Myoepithelial-no(%)	-	-	2 (33.3)	-	**2 (33.3)**	-	-	2 (33.3)

UNPUBLISHED DATA-TMH

Table 4. Molecular Targeted Therapy in Salivary Gland Carcinoma: Summary of Phase II Trials

Therapeutic Agent	ACC			Non-ACC		
	No. of Responses	Disease Stabilization	Total Patients	No. of Responses	Disease Stabilization	Total Patients
Imatinib[50,51]	0	11	26	-	-	–
Gefitinib[66]	0	7	18	0	4	18
Cetuximab[67]	0	12	23	0	3	7
Trastuzumab[56]	0	0	2	1 (MEC)	0	12
Lapatinib[53]	0	15	19	0	8	19
Bortezomib[68]	0	15	21	-	-	-
Sunitinib[69]	0	11	13	-	-	-
Sorafenib[70]	2	13	23	-	-	-
Dovitinib[73]	2	9	19	-	-	-

ACC = adenoid cystic carcinoma; MEC = mucoepidermoid carcinoma.

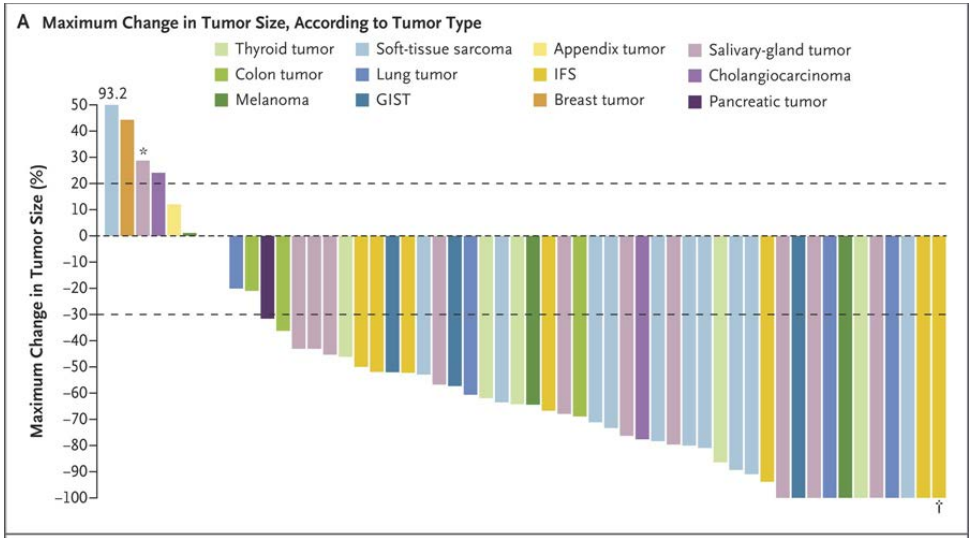
Goyal et al. *Oncology (Williston Park). 29(10):773-780*

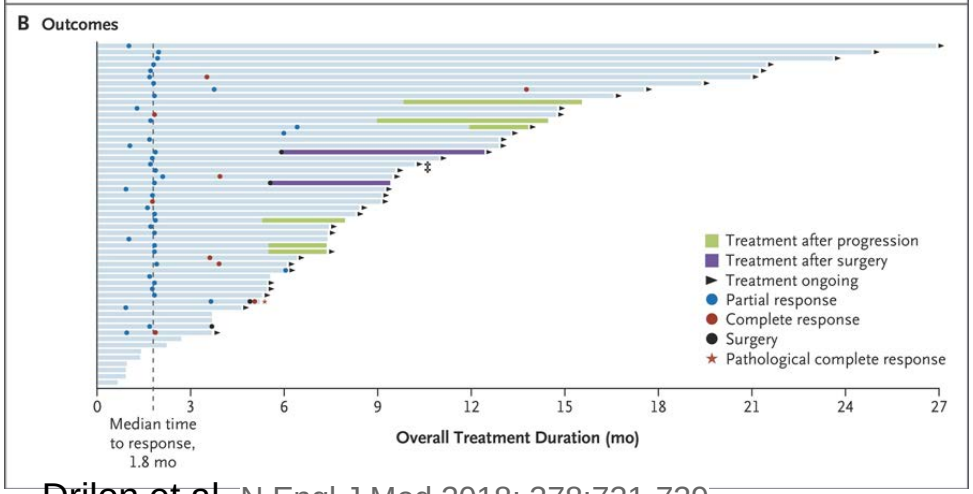
	Observation (n=9)	Cytotoxic therapy (n=35)	Targeted therapy (n=25)	P value
Presence of Metastasis-no (%)	6 (66.7)	20 (57.1)	19 (76)	0.341
Sites of metastasis-no (%) Lung Liver Bone	 3 (33.1) 2 (22.2) 4 (44.4)	 20 (57.1) 5 (14.3) 7 (20)	 17 (68) 6 (24) 9 (36)	 0.211 0.607 0.222
Types of histology-no (%) Adenoid Cystic Non-adenoid cystic	 5 (55.6) 4 (44.4)	 18 (51.4) 17 (48.6)	 16 (64) 9 (36)	 0.653*
Mutation-no (%)# Negative Positive	 4 (44.4) 5 (55.6)	 14 (40) 21 (60)	 13 (52) 12 (48)	 0.425
Asymptomatic status-no (%)	7 (77.5)	2 (5.7)	10 (40)	0.000
Previous DFI-Median (range)	22.16 (4.4-33.4)	15.7 (6.1-58.7)	8.7 (4.1-21.0)	0.229$
Visceral crisis-no (%)	-	22 (62.9)	5 (20)	0.000

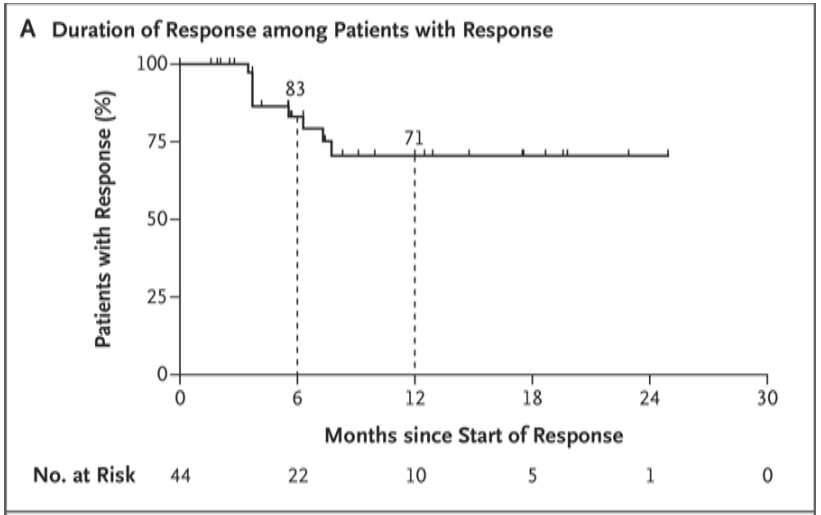
UNPUBLISHED DATA-TMH

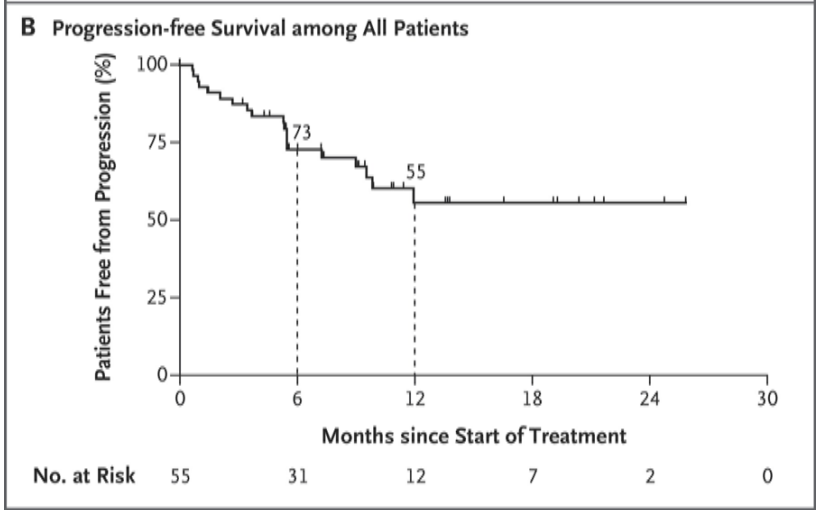
	Progression-free survival		Overall survival	
	Number/Events	Median (95%CI) in months	Number/Events	Median (95%CI) in months
Overall	69/57	8.10 (6.07-10.53)	69.0 /47.0	19.0 (12.2-23.9)
Observation	9/6	17.0 (0.933- NA)	9/5	32.3 (0.933-NA)
Chemotherapy	35/31	6.7 (5.833- 9.6)	35/25	19.1 (14.200- 23.8)
Targeted therapy	25/20	10.1 (5.167-13.1)	25/17	12.2 (5.267-52.4)
P value	0.281		0.763	

NTKR fusion gene positive









Drilon et al. N Engl J Med 2018; 378:731-739

Table 3. Adverse Events.*

Adverse Event	Adverse Events, Regardless of Attribution					Treatment-Related Adverse Events		
	Grade 1	Grade 2	Grade 3	Grade 4	Any Grade	Grade 3	Grade 4	Any Grade
	percent of patients with event							
Increased ALT or AST level	31	4	7	0	42	5	0	38
Fatigue	20	15	2	0	36	0	0	16
Vomiting	24	9	0	0	33	0	0	11
Dizziness	25	4	2	0	31	2	0	25
Nausea	22	7	2	0	31	2	0	16
Anemia	9	9	11	0	29	2	0	9
Diarrhea	15	13	2	0	29	0	0	5
Constipation	24	4	0	0	27	0	0	16
Cough	22	4	0	0	25	0	0	2
Increased body weight	11	5	7	0	24	0	0	11
Dyspnea	9	9	0	0	18	0	0	2
Headache	13	4	0	0	16	0	0	2
Pyrexia	11	2	2	2	16	0	0	0
Arthralgia	15	0	0	0	15	0	0	2
Back pain	5	9	0	0	15	0	0	0
Decreased neutrophil count	0	7	7	0	15	2	0	9

* The adverse events listed here are those that occurred in at least 15% of the patients, regardless of attribution. The relatedness of the treatment to adverse events was determined by the investigators. ALT denotes alanine aminotransferase, and AST aspartate aminotransferase.

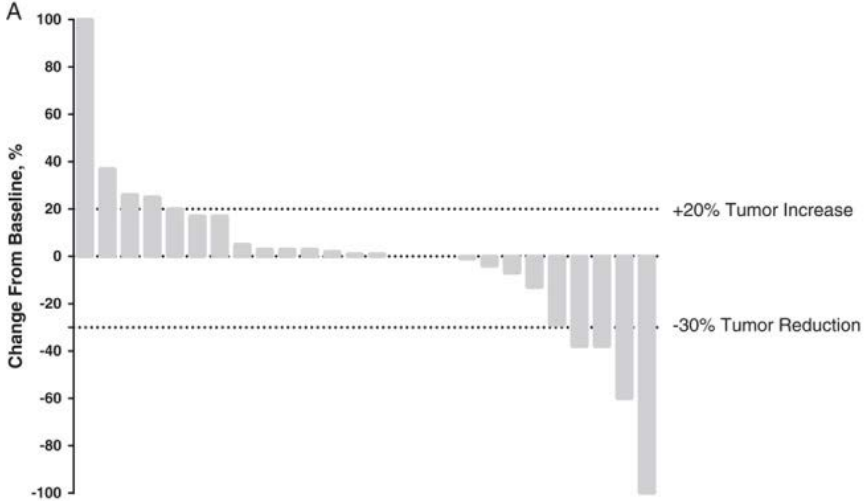
Drilon et al. N Engl J Med 2018; 378:731-739

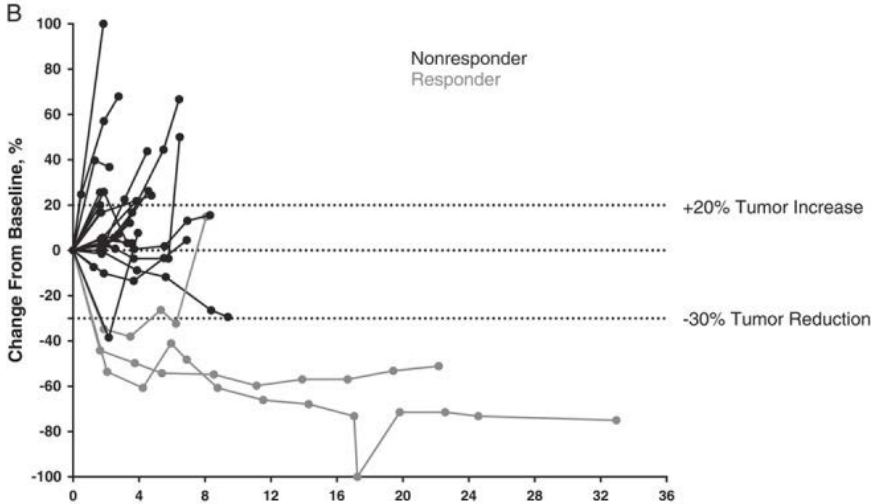
Salivary gland-Immunotherapy

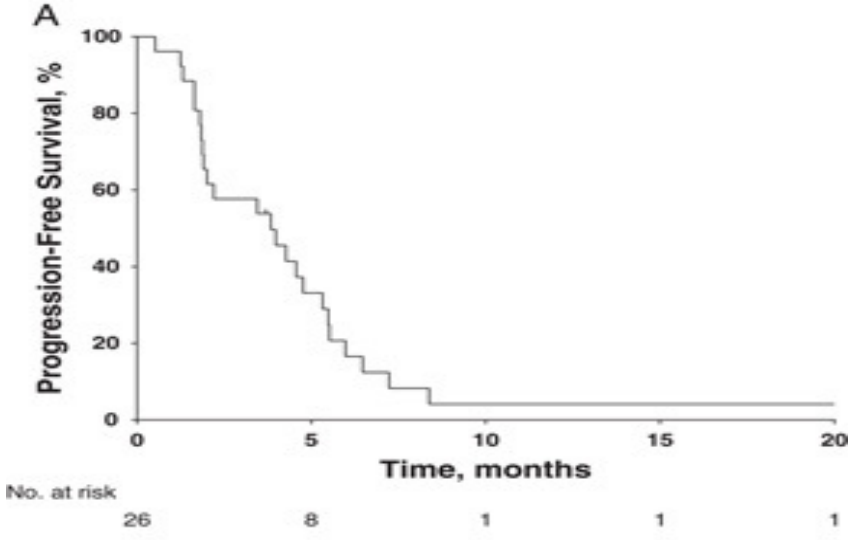
Baseline Demographics and Clinical Characteristics

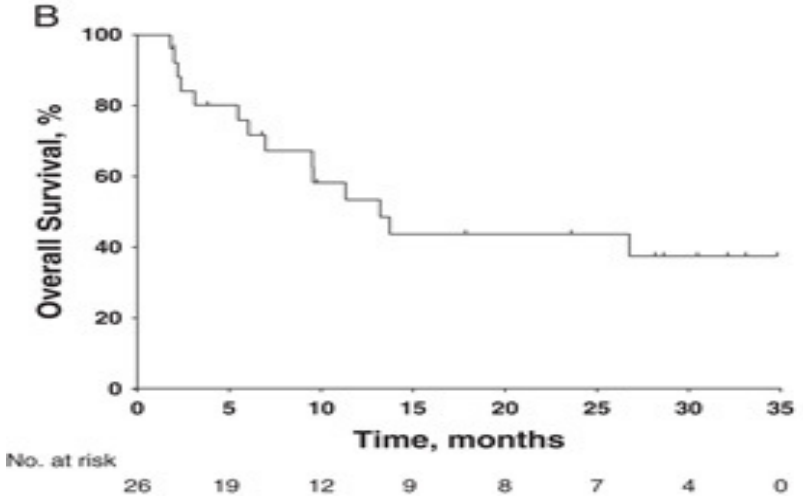
Prior lines of therapy for advanced disease‡	
0	3 (12)
1	9 (35)
2	4 (15)
3	2 (8)
4	2 (8)
≥5	2 (8)
Previous therapies received by ≥2 patients§	
Taxane‖ + a platinum¶	15 (58)
A platinum¶ + other#	16 (62)
Fluorouracil ± a platinum¶ ± other**	5 (19)
Trastuzumab ± a platinum¶ ± a taxane‖	3 (12)
Vinorelbine ± a platinum¶	2 (8)
Cetuximab monotherapy	3 (12)
Doxorubicin monotherapy	3 (12)
Capecitabine ± trastuzumab††	3 (12)
Tegafur ± uracil	2 (8)
Goserelin acetate monotherapy	2 (8)

Cohen et al. Am J Clin Oncol. 2018 Feb 21.



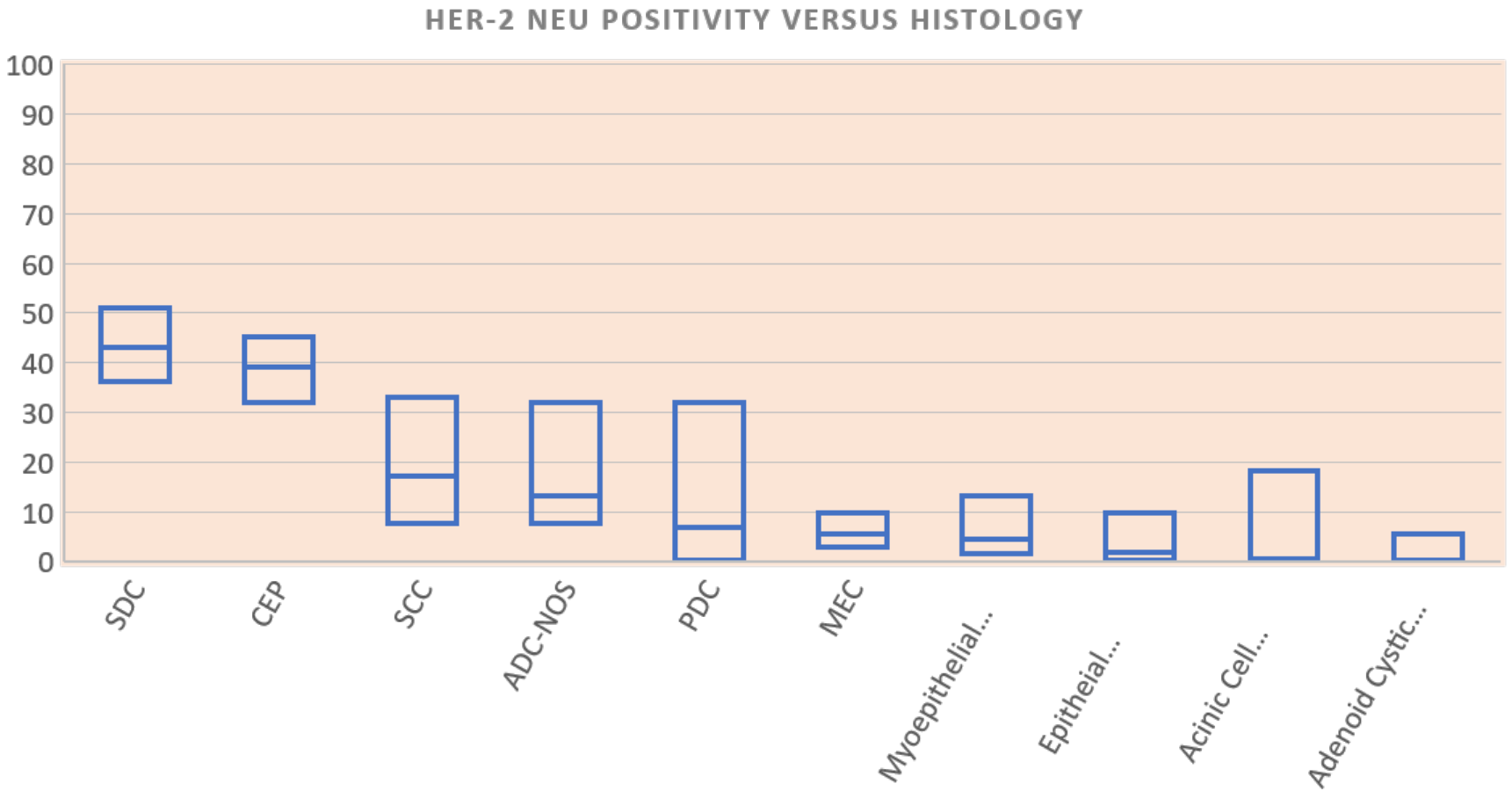






Cohen et al. Am J Clin Oncol. 2018 Feb 21.

Her-2 neu



Egebjerg et al. https://www.frontiersin.org/articles/10.3389/fonc.2021.693394/full

Journal of Clinical Oncology > List of Issues > Volume 37, Issue 2 >

ORIGINAL REPORTS | Head and Neck Cancer

Phase II Trial of Trastuzumab and Docetaxel in Patients With Human Epidermal Growth Factor Receptor 2–Positive Salivary Duct Carcinoma

Hideaki Takahashi, MD, PhD[1]; Yuichiro Tada, MD[1] ✉; Takashi Saotome, MD[2]; Kohei Akazawa, PhD[3]; Hiroya Ojiri, MD, PhD[4]; Chihiro Fushimi, DDS, PhD[1]; ...

Show More

H.T. and Y.T. contributed equally to this study.

Unknown	16 (28)
Sample used for HER2 analysis	
Primary tumor	50 (88)
Cervical lymph node	4 (7)
Metastatic lesion	3 (5)
HER2 status	
Positive*	57 (100)
Immunohistochemistry score	
3+	52 (91)
2+	5 (9)
FISH HER2/CEP17 ratio	
≥ 2.0	51 (89)
< 2.0	5 (9)
Not available	1 (2)
HER2 gene copy number	
< 4.0	4 (7)
≥ 4.0, < 6.0	7 (12)
≥ 6.0, < 12.0	27 (47)
≥ 12.0	18 (32)
Not available	1 (2)
FISH status	

Previous agents	
Platinum	16 (28)
Docetaxel	7 (12)
Paclitaxel	5 (9)
S1	4 (7)
ADT	3 (5)
Other agents	11 (19)
No. of previous lines of systemic therapy for metastatic disease	
1	9 (16)
2	2 (4)
3	3 (5)
4	1 (2)
Previous chemotherapy regimen received for metastatic disease	
Paclitaxel + carboplatin	5 (9)
S1 monotherapy	4 (7)
Docetaxel + carboplatin	2 (4)
Bicalutamide + leuprorelin	2 (4)
Other regimens	12 (21)
Median interval from previous systemic therapy, weeks (range)	18 (2-69)

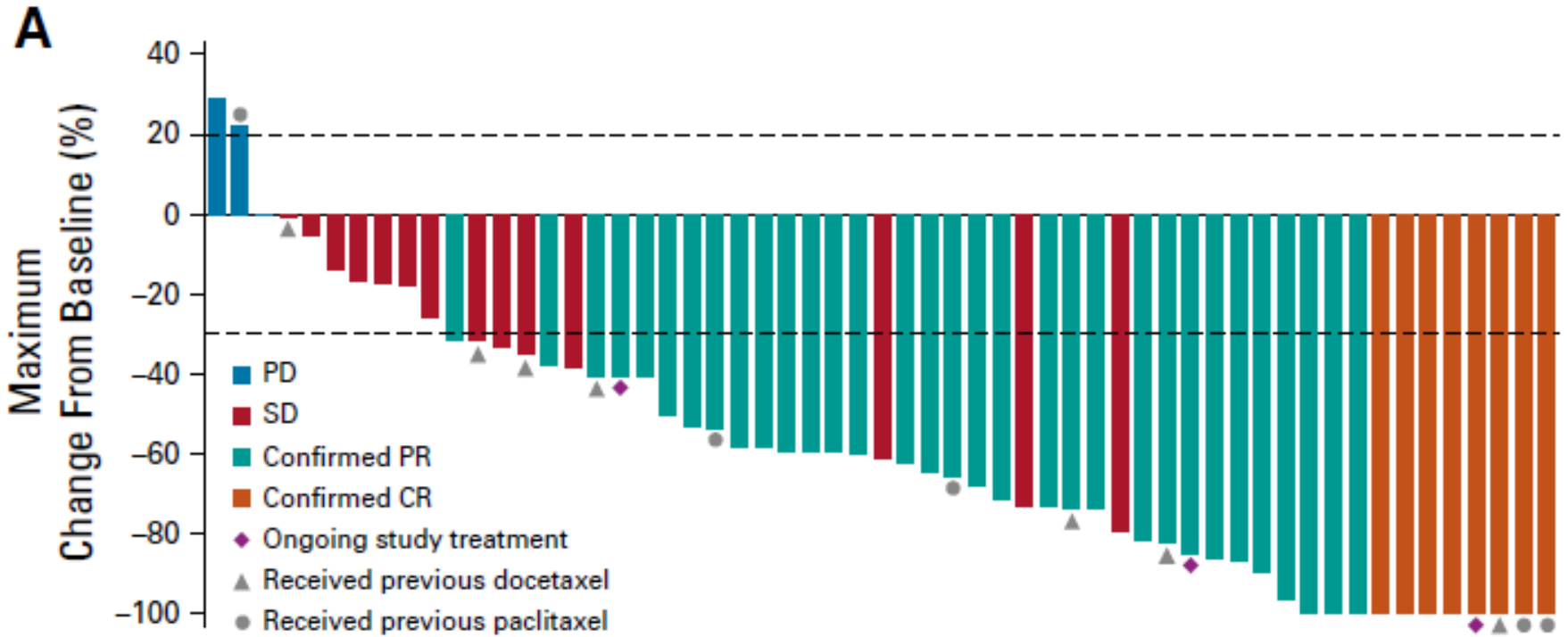

A
Maximum Change From Baseline (%)
40
20
0
–20
–40
–60
–80
–100
PD
SD
Confirmed PR
Confirmed CR
Ongoing study treatment
Received previous docetaxel
Received previous paclitaxel

TABLE 2. Treatment Efficacy

Outcome	All patients (N = 57)
Complete response	8 (14.0)
Partial response	32 (56.1)
Stable disease	14 (24.6)
Progressive disease	3 (5.3)
Objective response*	40 (70.2)
95% CI, %	56.6 to 81.6
Stable disease ≥ 24 weeks	8 (14.0)
Clinical benefit†	48 (84.2)
95% CI, %	72.1 to 92.5
Median progression-free survival, months	8.9
95% CI, months	7.8 to 9.9
Median overall survival, months	39.7
95% CI, months	(NR)

ORIGINAL ARTICLE

Targeted therapy for advanced salivary gland carcinoma based on molecular profiling: results from MyPathway, a phase IIa multiple basket study

R. Kurzrock[1*], D. W. Bowles[2], H. Kang[3†], F. Meric-Bernstam[4], J. Hainsworth[5,6], D. R. Spigel[5,6], R. Bose[7], H. Burris[5,6], C. J. Sweeney[8], M. S. Beattie[9], S. Blotner[10], K. Schulze[11], V. Cuchelkar[12] & C. Swanton[13]

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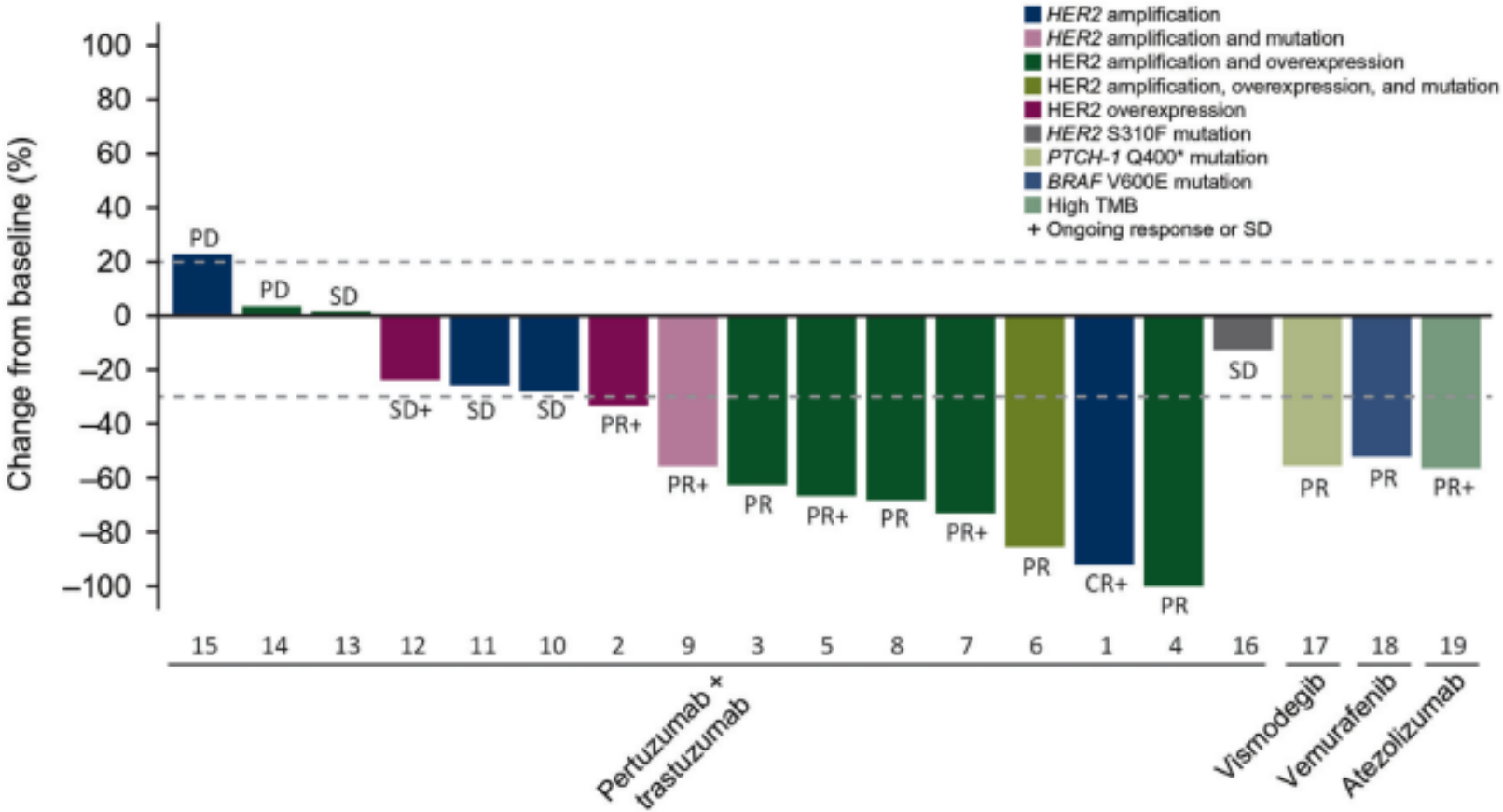
Available online 24 January 2020

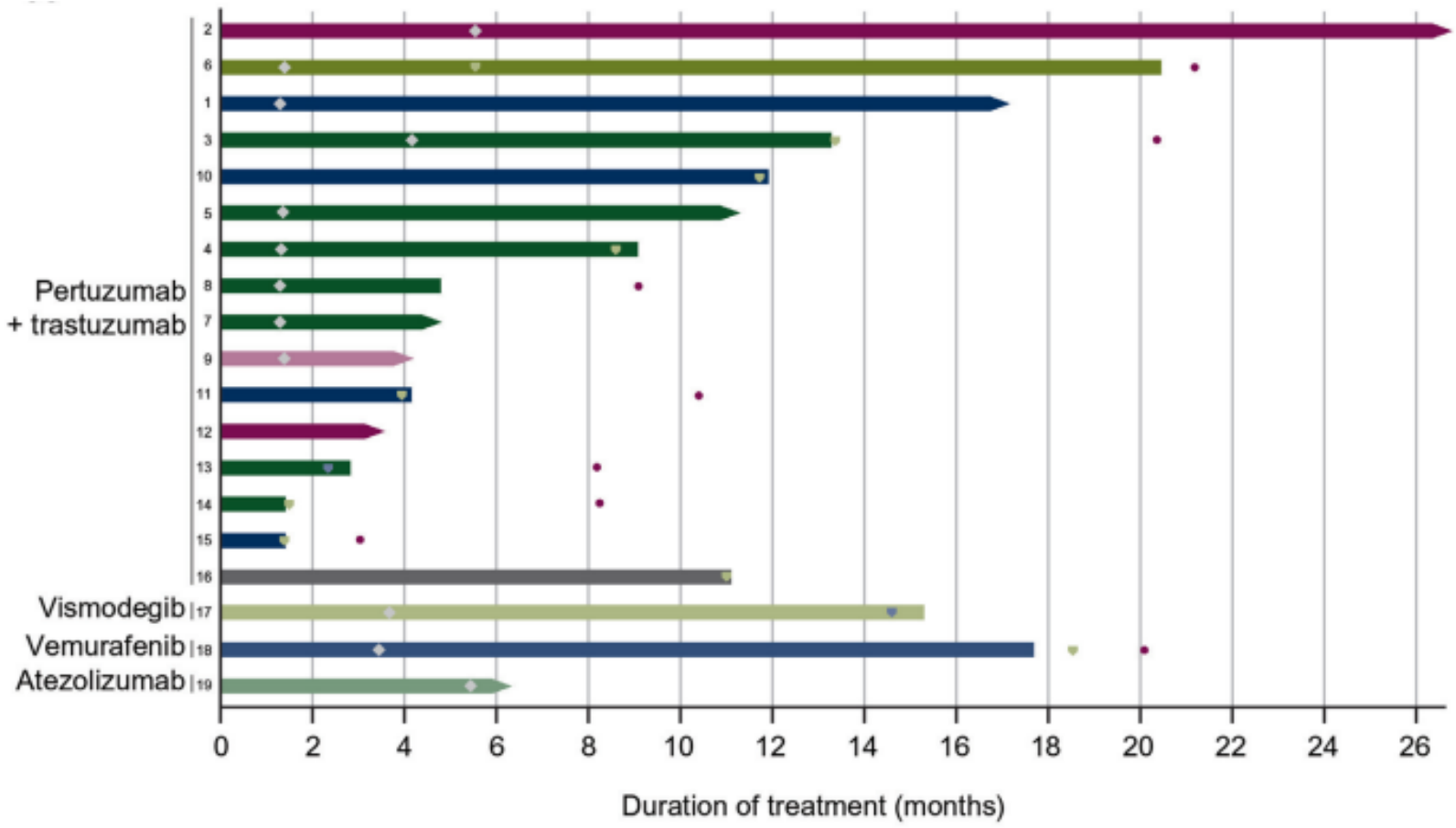
Table 1. Baseline demographics and clinical characteristics by patient

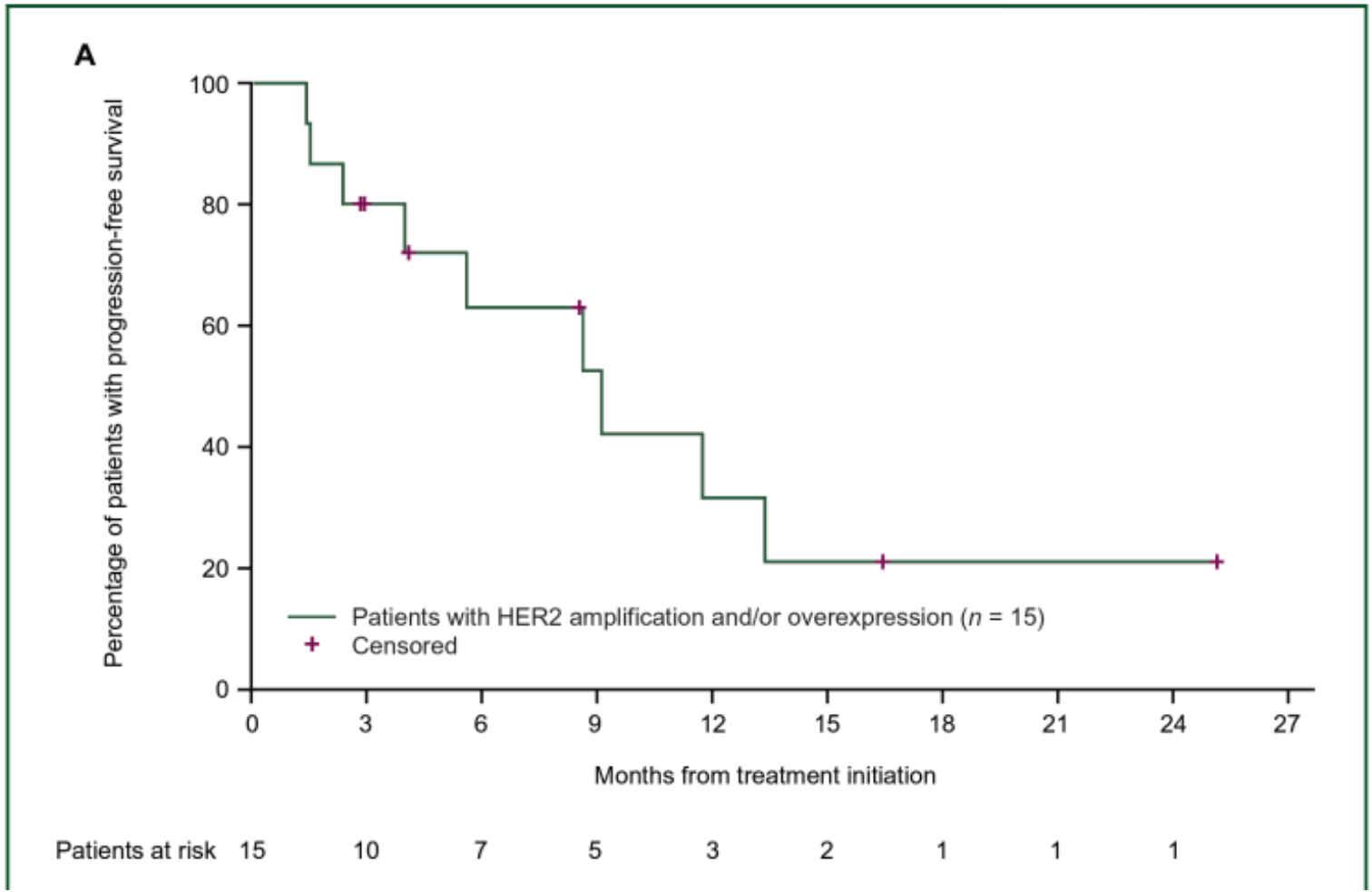
Pt	Sex	Age, years	Race	ECOG PS	Histology	Grade	Stage	Alteration	Testing platform[a]	Previous lines of therapy[b]	Sites of metastasis
HER2 amplification and/or overexpression: treated with pertuzumab + trastuzumab											
1	M	59	White	0	Salivary duct adenocarcinoma	G3	IV	*HER2* amplification	NGS (copy number = 15)	1	Brain, lung, LN
2	M	80	White	1	Adenocarcinoma	G2	IVA	HER2 overexpression	IHC (3+)	1	Bone, LN
3	M	55	Black/African American	2	Unspecified carcinoma	G3	IVA	HER2 amplification + overexpression	FISH/CISH (ratio = 7.3), IHC (3+)	2	Bone, lung, LN
4	M	70	White	1	Invasive ductal carcinoma	G4	IV	HER2 amplification + overexpression	FISH/CISH (ratio = 2.4), IHC (3+)	1	Bone, liver, LN
5	M	73	White	1	Adenocarcinoma	G3	IV	HER2 amplification + overexpression	FISH/CISH (ratio = 9.9), IHC (3+)	1	Bone, LN, spleen
6	M	47	White	1	Adenocarcinoma	G3	IVC	HER2 amplification, overexpression + mutation	NGS (copy number gain; L755F and D769H mutations), IHC (3+)	0	Bone, LN
7	M	61	White	1	Unspecified carcinoma	G3	III	HER2 amplification + overexpression	NGS (copy number = 94); IHC (3+)	0	Liver, lung
8	F	54	White	0	Adenocarcinoma	G3	IV	HER2 amplification + overexpression	NGS (copy number = 104), IHC (3+)	0	Liver, LN
9	M	54	Other	1	Unspecified carcinoma	G3	III	*HER2* amplification + mutation	FISH/CISH (ratio = 5.5), NGS (G776V mutation)	0	Bone, lung, LN
10	F	75	Asian	0	Adenocarcinoma	G3	IVA	*HER2* amplification	NGS (copy number gain)	0	Lung
11	M	70	White	1	Unspecified carcinoma	G1	IVC	*HER2* amplification	NGS (copy number = 60)	2	Bone, liver, lung, LN, intraorbital
12	M	37	White	1	Adenocarcinoma	GX	IV	HER2 overexpression	IHC (3+)	1	Bone, liver
13	M	62	American Indian or Alaska native	1	Mucoepidermoid carcinoma	G3	III	HER2 amplification + overexpression	FISH/CISH (ratio = 7.8), NGS (copy number = 20), IHC (3+)	3	Adrenal gland, liver, lung, LN
14	M	48	Asian	1	Invasive ductal carcinoma	G4	IVA	HER2 amplification + overexpression	FISH/CISH (ratio = 7.2), IHC (3+)	1	Brain, lung, LN
15	F	44	White	2	Adenocarcinoma	G3	IV	*HER2* amplification	NGS (copy number = 15)	2	Brain, chest wall, left eye, liver, LN, neck (subcutaneous tissue), parapharyngeal mucosa
***HER2* mutation: treated with pertuzumab + trastuzumab**											
16	M	68	White	0	Adenocarcinoma	G3	III	*HER2* mutation	NGS (S310F mutation)	0	Lung, LN, mediastinum

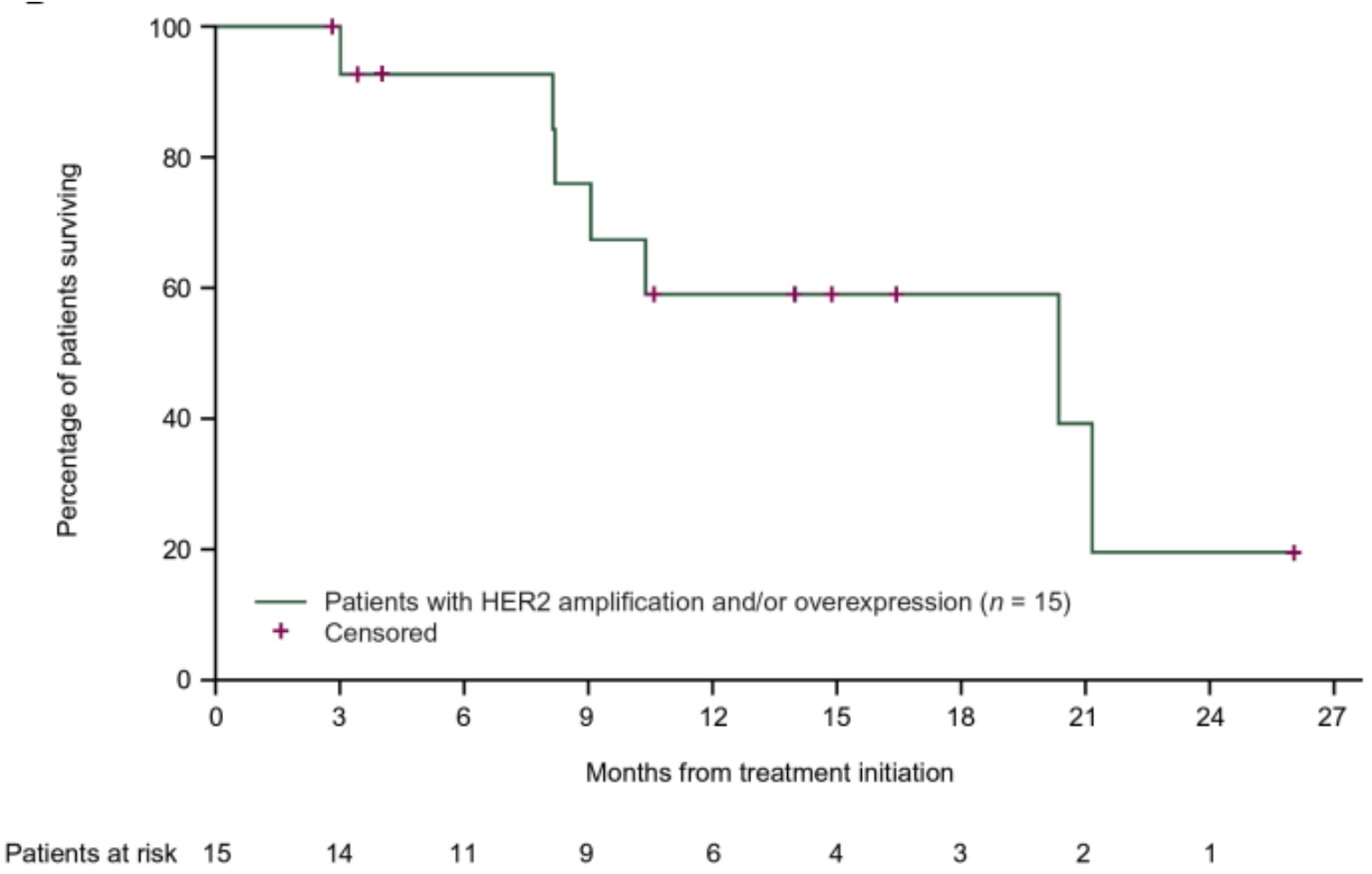
Table 2. Clinical outcomes by patient

Pt	Alteration	Time on treatment, months	Best response	Duration of response, months	Duration of SD, months	Best change in target lesion size from baseline, %	PFS, months	OS, months
HER2 amplification and/or overexpression: treated with pertuzumab + trastuzumab								
1	*HER2* amplification	16.5+	CR	15.2+	–	–91.7[a]	16.5+	16.5+
2	HER2 overexpression	26.1+	PR	19.7+	–	–33.3	25.2+	26.1+
3	HER2 amplification and overexpression	12.6	PR	9.2	–	–62.5	13.4	20.4
4	HER2 amplification and overexpression	8.3	PR	7.3	–	–100.0[b]	8.6	14.9+
5	HER2 amplification and overexpression	10.6+	PR	7.2+	–	–66.7	8.5+	10.6+
6	HER2 amplification, overexpression, and mutation (L755F and D769H)	19.8	PR	4.2	–	–85.7	5.6	21.2
7	HER2 amplification and overexpression	4.1+	PR	2.8+	–	–73.0	4.0+	4.1+
8	HER2 amplification and overexpression	4.1[c]	PR	2.7	–	–68.2	9.1	9.1
9	*HER2* amplification and mutation (G776V)	3.5+	PR	1.4+	–	–55.7	2.8+	3.5+
10	*HER2* amplification	11.2	SD	–	11.7	–27.9	11.7	14.0+
11	*HER2* amplification	3.5	SD	–	3.9	–25.6	3.9	10.4
12	HER2 overexpression	2.9+	SD	–	2.9+	–24.3	2.9+	2.9+
13	HER2 amplification and overexpression	2.1	SD	–	2.3	1.4	2.3	8.2
14	HER2 amplification and overexpression	0.7	PD	–	–	3.6	1.5	8.3
15	*HER2* amplification	0.7	PD	–	–	22.5	1.4	3.1
***HER2* mutation: treated with pertuzumab + trastuzumab**								
16	*HER2* mutation (S310F)	10.4	SD	–	11.0	–12.8	11.0	13.7+


Change from baseline (%)
100
80
60
40
20
0
–20
–40
–60
–80
–100
HER2 amplification
HER2 amplification and mutation
HER2 amplification and overexpression
HER2 amplification, overexpression, and mutation
HER2 overexpression
HER2 S310F mutation
PTCH-1 Q400* mutation
BRAF V600E mutation
High TMB
+ Ongoing response or SD
PD
PD
SD
SD+
SD
SD
PR+
PR+
PR
PR+
PR
PR+
PR
CR+
PR
SD
PR
PR
PR+
15
14
13
12
11
10
2
9
3
5
8
7
6
1
4
16
17
18
19
Pertuzumab + trastuzumab
Vismodegib
Vemurafenib
Atezolizumab


Pertuzumab
+ trastuzumab
Vismodegib
Vemurafenib
Atezolizumab
2
6
1
3
10
5
4
8
7
9
11
12
13
14
15
16
17
18
19
0
2
4
6
8
10
12
14
16
18
20
22
24
26
Duration of treatment (months)


A
Percentage of patients with progression-free survival
100
80
60
40
20
0
Patients with HER2 amplification and/or overexpression (n = 15)
Censored
0
3
6
9
12
15
18
21
24
27
Months from treatment initiation
Patients at risk
15
10
7
5
3
2
1
1
1


100
80
60
40
20
0
Percentage of patients surviving
Patients with HER2 amplification and/or overexpression (n = 15)
Censored
0
3
6
9
12
15
18
21
24
27
Months from treatment initiation
Patients at risk
15
14
11
9
6
4
3
2
1

Meeting Abstract | 2019 ASCO Annual Meeting I

HEAD AND NECK CANCER

Ado-trastuzumab emtansine in patients with *HER2* amplified salivary gland cancers (SGCs): Results from a phase II basket trial.

Bob T. Li, Ronglai Shen, Michael Offin, Darren J. Buonocore, Mackenzie L. Myers, Aishwarya Venkatesh, ...

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Abstract Disclosures

Baseline & Response

- 10 patients with *HER2* amplified SGCs were treated.
- The median age was 65 (range 36-90 years), 90% were male.
- The median lines of prior systemic therapy was 2 (range 0-3).

- ORR was 90% (9/10, 95% CI 56-100%) including 5 complete responses after prior trastuzumab, pertuzumab and anti-androgen therapy

Efficacy & Adverse events

- After a median follow up period of 12 months (range 4-20 months), median DOR (range 2-19+) and median PFS (95% CI 4–22+ months) were not reached.
- Toxicities included grade 1 or 2 infusion reaction, thrombocytopenia and transaminitis; there were no treatment related deaths.

ELSEVIER

Oral Oncology

Volume 125, February 2022, 105703

Case series of docetaxel, trastuzumab, and pertuzumab (DTP) as first line anti-HER2 therapy and ado-trastuzumab emtansine (T-DM1) as second line for recurrent or metastatic HER2-positive salivary duct carcinoma

M.J.M. Uijen [a, 1], G. Lassche [a, 1], A.C.H. van Engen-van Grunsven [b], C.M.L. Driessen [a], C.M.L. van Herpen [a]

PatientNo.	Age	Gender	Primary tumor	Prior treatments	Disease distribution	Sites of DM	HER2 status assessed on	HER IHC	HER FISH	AR IHC [†]
1	48	F	Parotid gland	Surgery + PORT	DM	Lung	Primary tumor	3+	amplified	positive
2	64	M	Parotid gland	Surgery + PORT Palliative ADT	DM	Lung, liver, lymph node	Primary tumor	3+	amplified	positive
3	54	M	Parotid gland	Surgery + PORT Palliative ADT	DM	Lung, liver, bone	Bone metastasis	3+	amplified	positive
4	59	M	Parotid gland	Surgery Palliative ADT	DM	Brain, bone, lymph node	Primary tumor	2–3+	amplified	positive
5	54	F	Parotid gland	Palliative ADT	LR + DM	Lung, liver, lymph node	Liver metastasis	2–3+	amplified	positive
6	51	M	Parotid gland	–	LR	–	Primary tumor	2–3+	amplified	positive
7	55	M	Parotid gland	Surgery	DM	Brain, lung, lymph node	Lung metastasis	3+	amplified	positive
8	66	F	Parotid gland	Surgery + PORT Adjuvant ADT	DM	Lung	Primary tumor	3+	amplified	positive
9	75	M	Submandibular gland	Surgery + PORT Adjuvant ADT	DM	Lung, lymph node	Primary tumor	3+	amplified	positive
10	64	M	Parotid gland	Palliative chemo[†] Palliative ADT	LR + DM	Lymph node	Lymph node metastasis	3+	amplified	positive
11	61	M	Parotid gland	Surgery + PORT Adjuvant ADT	DM	Liver	Liver metastasis	2–3+	amplified	positive
12	62	M	Parotid gland	Surgery + PORT Palliative Rx	LR + DM	Lymph node, brain	Primary tumor	3+	amplified	positive
13	67	M	Parotid gland	Surgery + PORT Palliative ADT	LR + DM	Lung, pancreas	Primary tumor	3+	amplified	positive

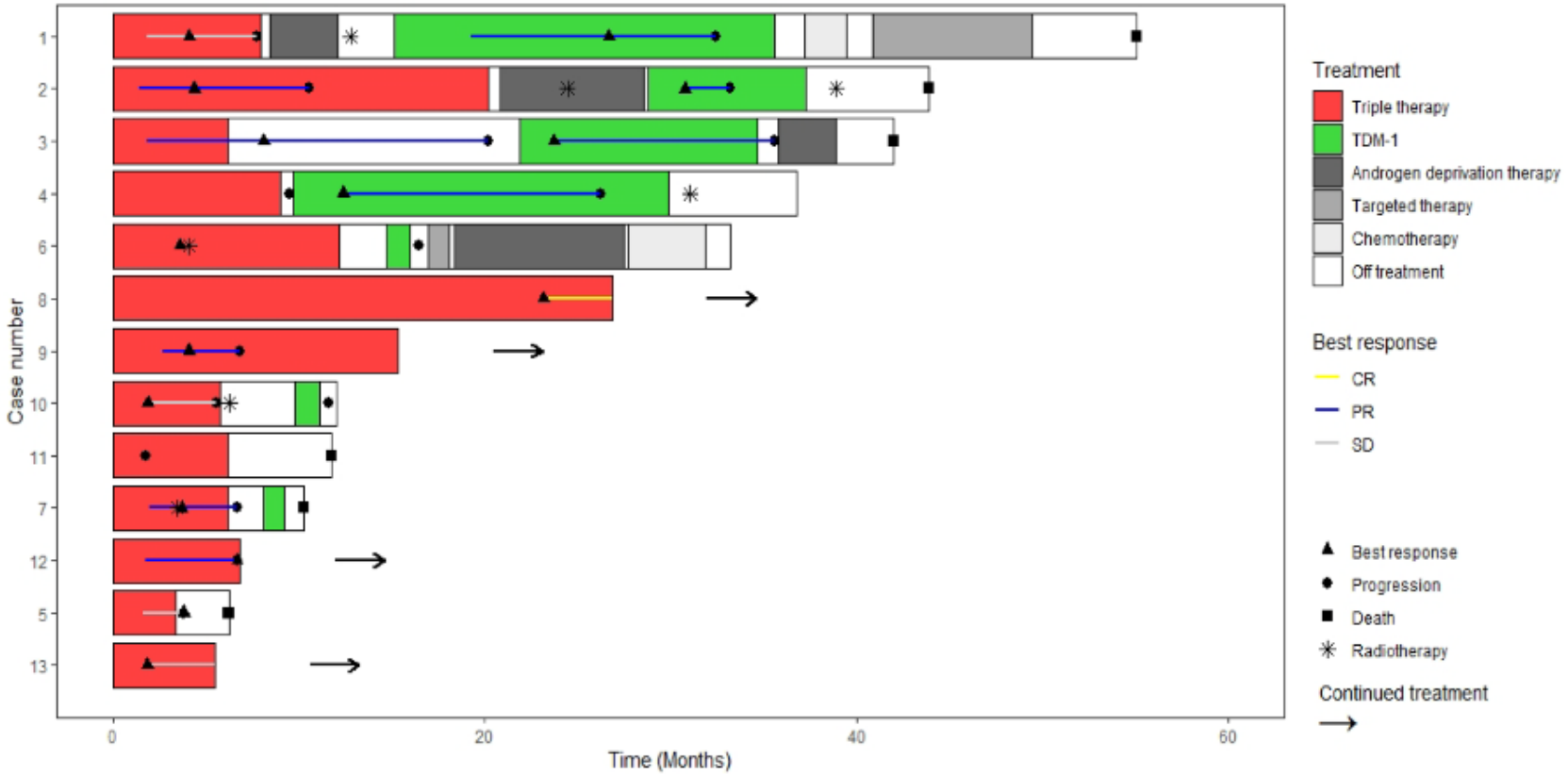

Figure 1. Swimmers plot, graphically summarizing treatment and response information per individual case.

Response to HER2 targeted therapy.

Patient No.	First-line HER2 targeted treatment (DTP therapy)	Best response	Best percentage change in target lesions	Duration of response	Second-line HER2 targeted treatment (T-DM1)	Best response	Best percentage change in target lesions	Duration of response
1	Docetaxel + trastuzumab + pertuzumab	SD	−17%	7.7 mo	T-DM1	PR	−78%	17.3 mo
2	Docetaxel + trastuzumab + pertuzumab	PR	−62%	10.6 mo	T-DM1	PR	−32%	4.4 mo
3	Docetaxel + trastuzumab + pertuzumab	PR	−100%	20.2 mo	T-DM1	PR	−42%	13.7 mo
4	Docetaxel + trastuzumab + pertuzumab	IR/SD*	N.A.	9.5 mo	T-DM1	PR	−40%	16.6 mo
5	Docetaxel + trastuzumab + pertuzumab	SD	−27%	3.8 mo	–	–	–	–
6	Docetaxel + trastuzumab + pertuzumab	PR	−33%	Unclear†	T-DM1	PD	+22%	1.8 mo
7	Docetaxel + trastuzumab + pertuzumab	PR	−45%	6.7 mo	T-DM1	PD	Unclear‡	Unclear‡
8	Docetaxel + trastuzumab + pertuzumab	CR	−100%	Ongoing at 26.8 mo	–	–	–	–
9	Docetaxel + trastuzumab + pertuzumab	PR	−78%	6.9 mo ¶	–	–	–	–
10	Docetaxel + trastuzumab + pertuzumab	SD	+1%	5.6 mo	T-DM1	PD	+34%	1.8 mo
11	Docetaxel + trastuzumab + pertuzumab	PD	+38%	1.8 mo	–	–	–	–
12	Docetaxel + trastuzumab + pertuzumab	PR	−68%	6.7 mo ¶	–	–	–	–
13	Docetaxel + trastuzumab + pertuzumab	SD	−2%	Ongoing at 5.5 mo	–	–	–	–

Post-op T-DM1 in HER-2+ Salivary Gland Carcinomas

ClinicalTrials.gov Identifier: NCT04620187

Recruitment Status : Recruiting
First Posted : November 6, 2020
Last Update Posted : December 28, 2021

See Contacts and Locations

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