Herbstmeeting 2020
Österreichischen Gesellschaft für Krankenhauspharmazie

Immunonkologische Highlights des Jahres 2020 – Ausblick auf 2021

17. Oktober 2020

Mag. Markus Krenn
Disease Area Specialist I-O at BMS

Bristol Myers Squibb™

10/20 1506AT2008847

Was sind Immunonkologische Highlights?

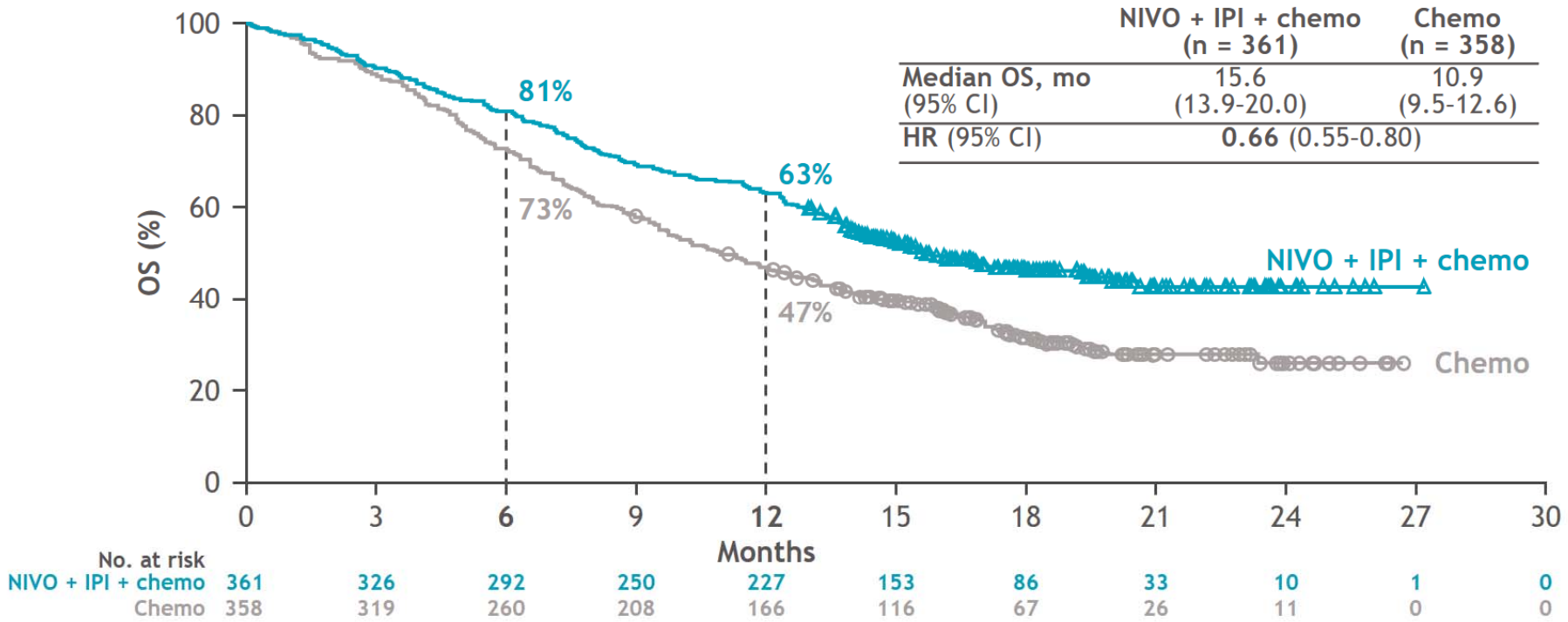
- Checkpoint Inhibitoren
- EMA Zulassungen / pos CHMP opinions
- Positive Ph III Studien
- Rückblick auf 12 Monate -> Ausblick auf 12 Monate
- Chronologische Abfolge entspricht Zeitpunkte der Bekanntgaben

Oktober 2019

- 1L NSCLC, Nivolumab + Ipilimumab + CT vs CT, CheckMate-9LA
- 1L NSCLC, Durvalumab + CT (+ Tremelimumab) vs CT, POSEIDON
- 1L HCC, Atezolizumab + Bevacizumab vs Sorafenib, IMbrave150

1L NSCLC, Nivolumab + Ipilimumab + CT vs CT

Oktober 2019



Minimum follow-up: 12.7 months.

Reck et al. ASCO 2020, Abstract 9501

1L NSCLC, Durvalumab + CT (+ Tremelimumab) vs CT

Oktober 2019

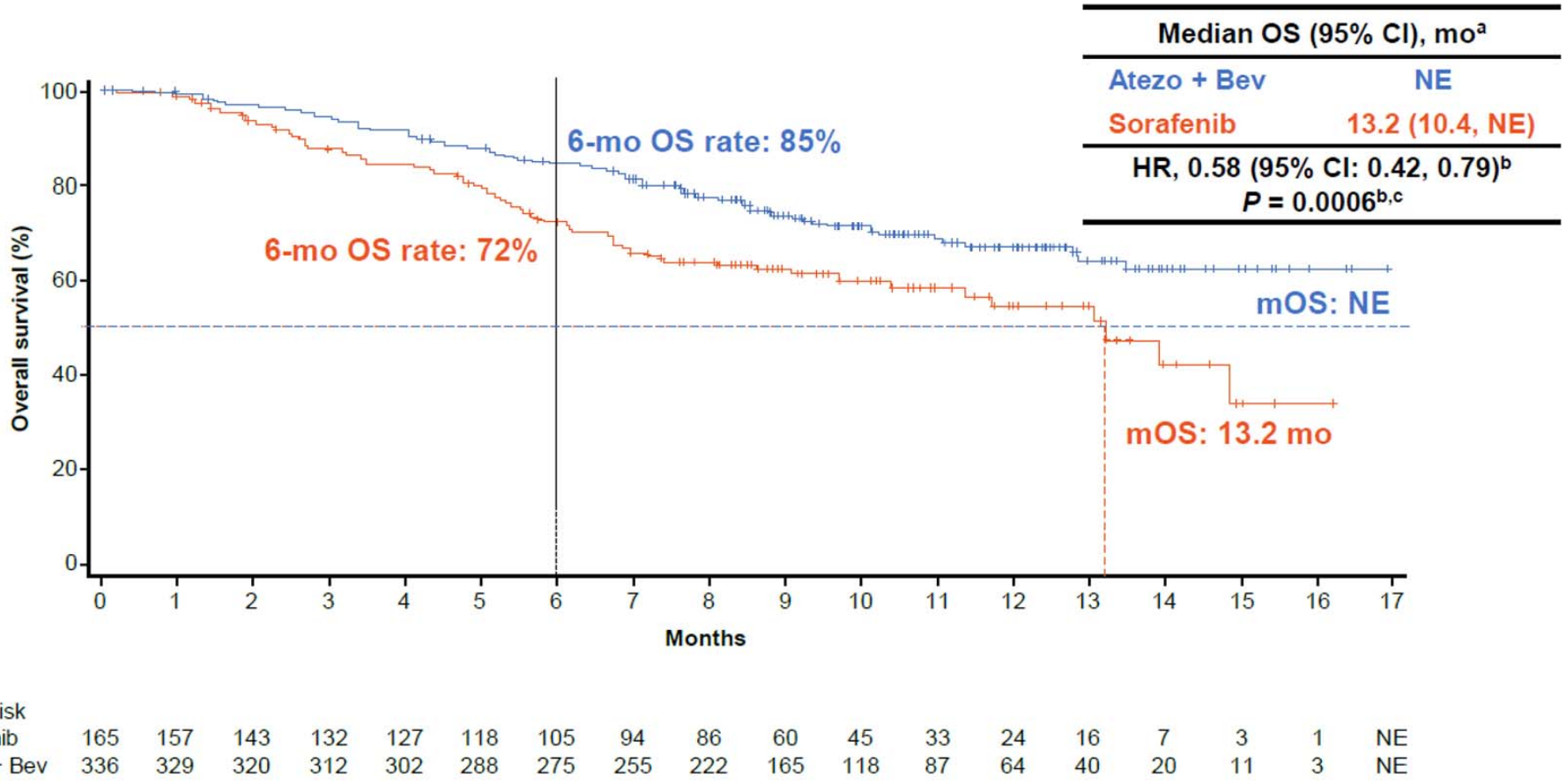
Imfinzi and Imfinzi plus tremelimumab delayed disease progression in Phase III POSEIDON trial for 1st-line treatment of Stage IV non-small cell lung cancer

POSEIDON included both non-squamous and squamous patients and a broad choice of standard chemotherapy options

PUBLISHED
28 October 2019

1L HCC, Atezolizumab + Bevacizumab vs Sorafenib

Oktober 2019



Cheng et al. ESMO Asia 2019

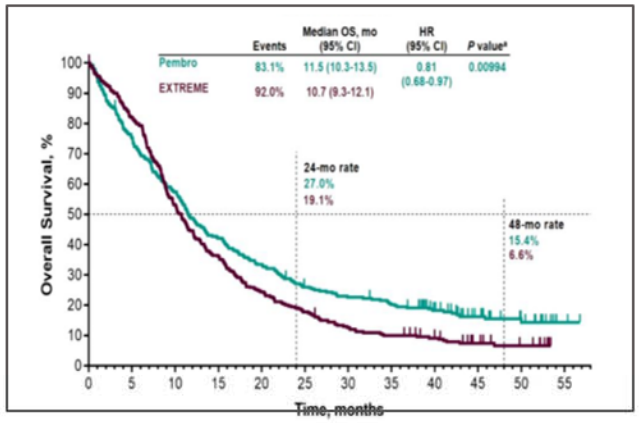
November 2019

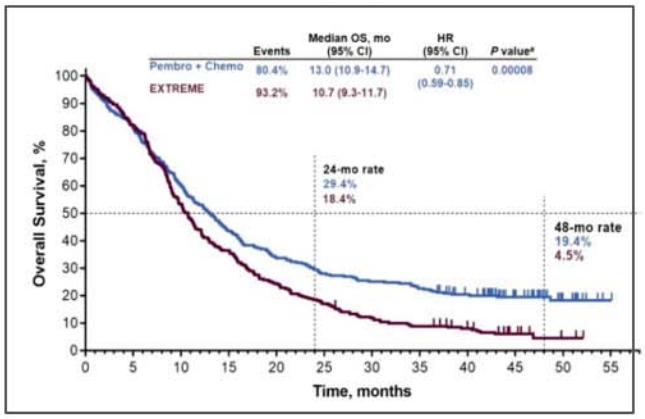
- 1L SCCHN, Pembrolizumab +/- CT vs EXTREME, Keynote-048, **EMA approval**

1L SCCHN, Pembrolizumab +/- CT vs EXTREME

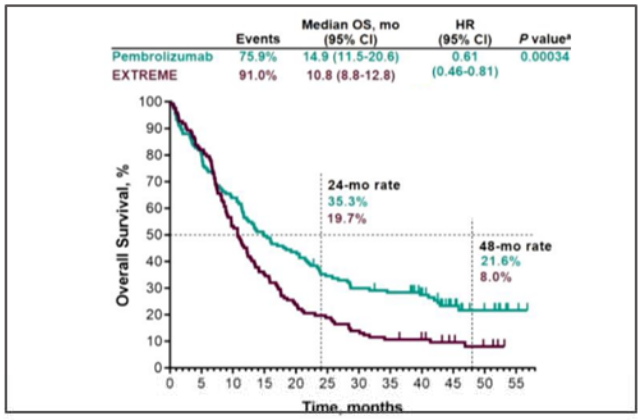
November 2019

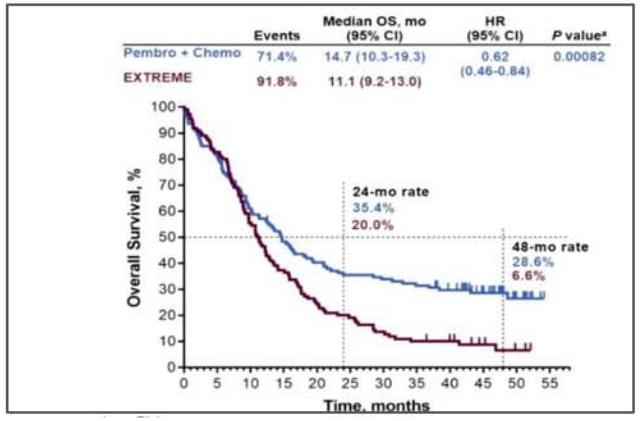
Total population



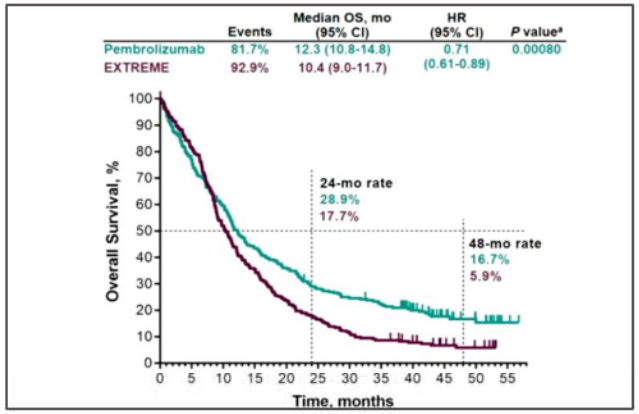


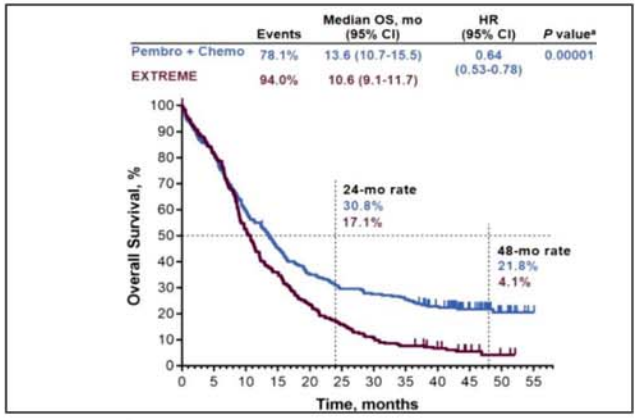
CPS≥20





CPS≥1





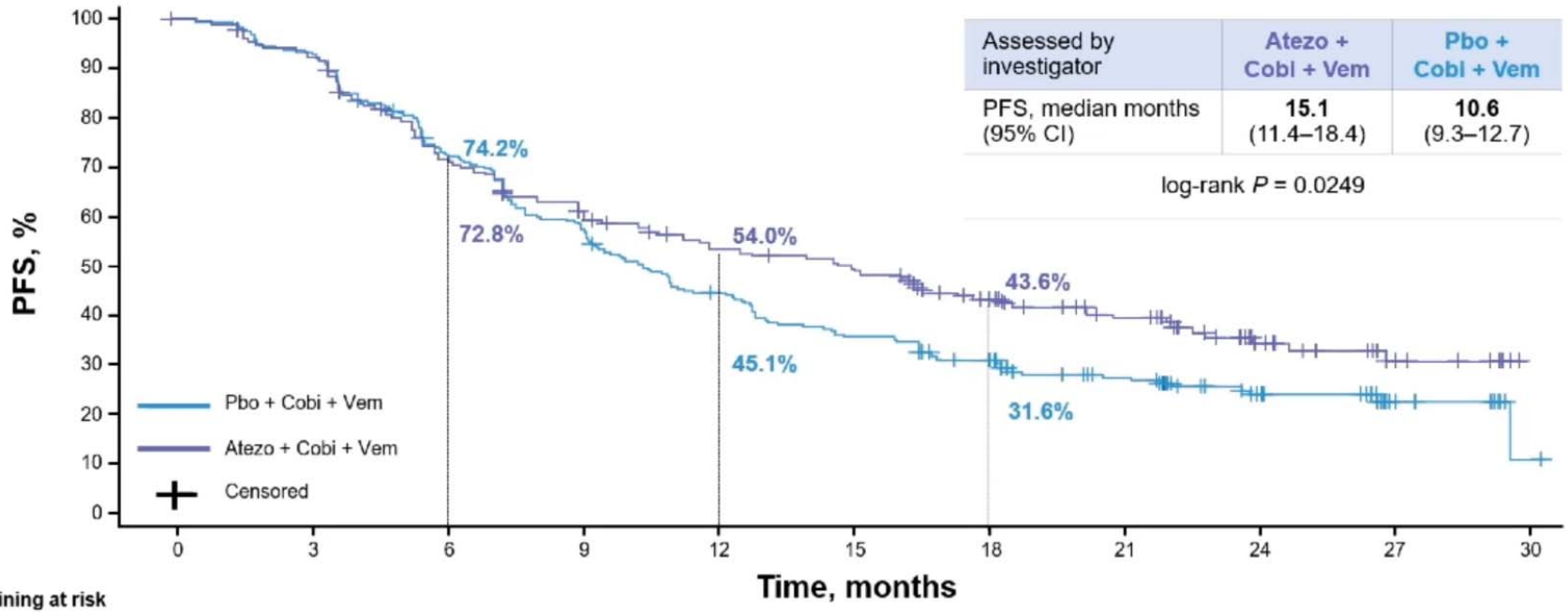
Greil et al. ESMO 2020

Dezember 2019

- 1L BRAF pos MEL, Atezolizumab + Cobimetinib + Vemurafenib vs Cobimetinib + Vemurafenib, IMspire150

1L MEL, Atezolizumab + Cobimetinib + Vemurafenib

Dezember 2019



Assessed by investigator	Atezo + Cobi + Vem	Pbo + Cobi + Vem
PFS, median months (95% CI)	**15.1** (11.4–18.4)	**10.6** (9.3–12.7)

log-rank $P = 0.0249$

Patients remaining at risk

Pbo + Cobi + Vem	258	230	179	143	107	86	71	51	27	11	1
Atezo + Cobi + Vem	256	229	174	149	123	114	90	66	34	11	

Atezo, atezolizumab; CI, confidence interval; Cobi, cobimetinib; Pbo, placebo; Vem, vemurafenib.

Grant et al. AACR 2020

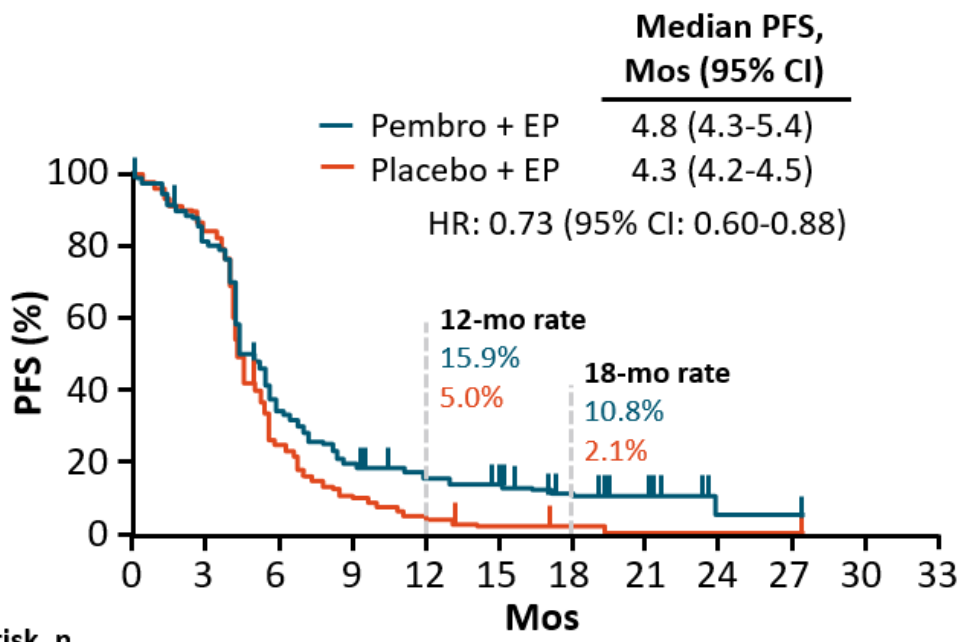
Jänner 2020

- 1L SCLC, Pembrolizumab + CT vs CT, Keynote-604

1L SCLC, Pembrolizumab + CT vs CT

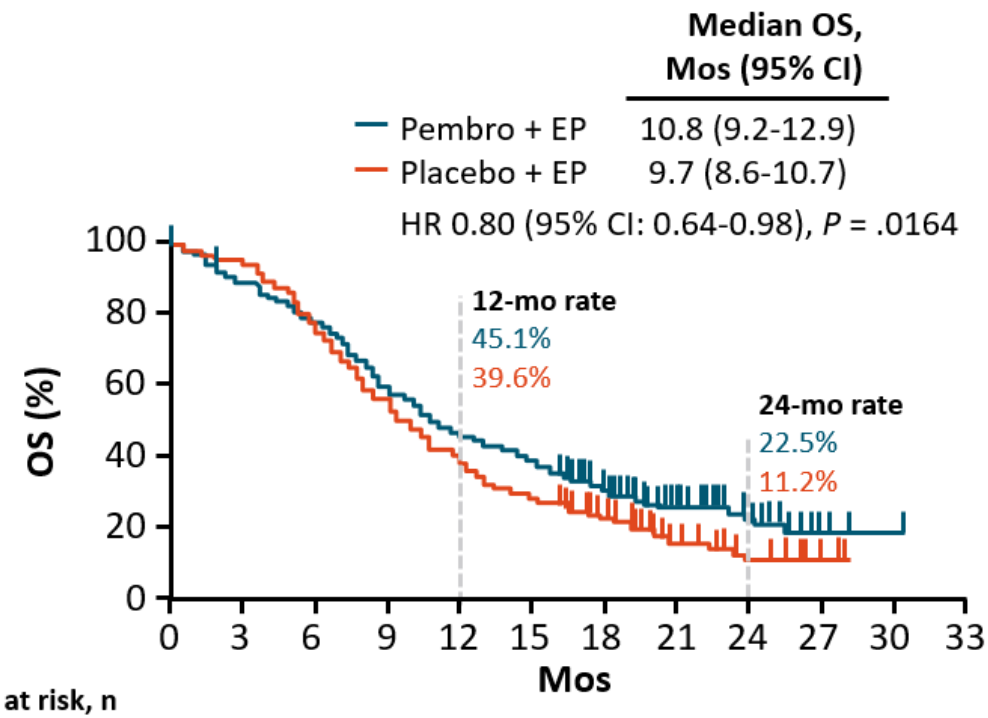
Jänner 2020

Final Analysis



Pts at risk, n												
Pembro + EP	228	182	76	42	32	26	15	10	1	1	0	0
Placebo + EP	225	189	56	23	11	4	3	1	1	1	0	0

ITT



Pts at risk, n												
Pembro + EP	223	198	174	132	102	87	60	31	15	3	1	0
Placebo + EP	223	211	169	122	89	63	44	19	8	3	0	0

Rudin et al. ASCO 2020

Februar 2020

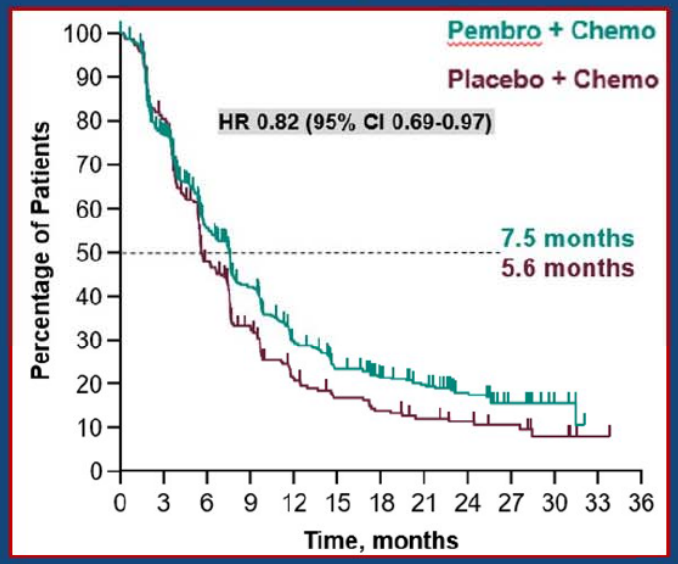
- 1L TNBC, Pembrolizumab + CT vs CT (CPS ≥10), Keynote-355

1L TNBC, Pembrolizumab + CT vs CT (CPS ≥10)

Februar 2020

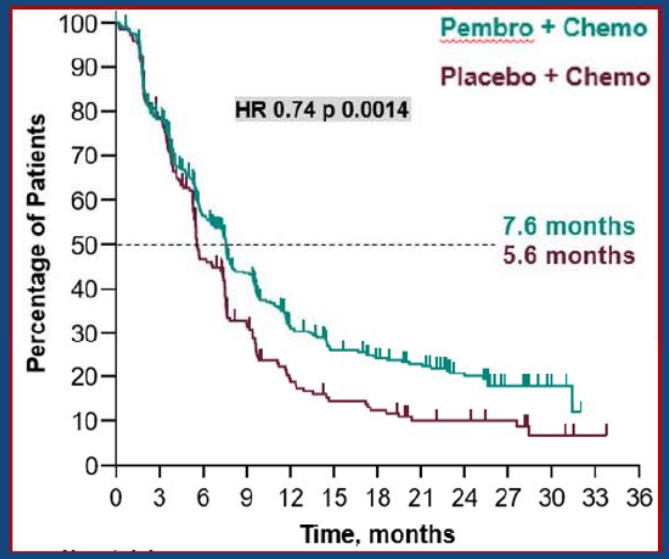
PFS

ITT



Statistical significance was not tested due to the prespecified hierarchical testing strategy

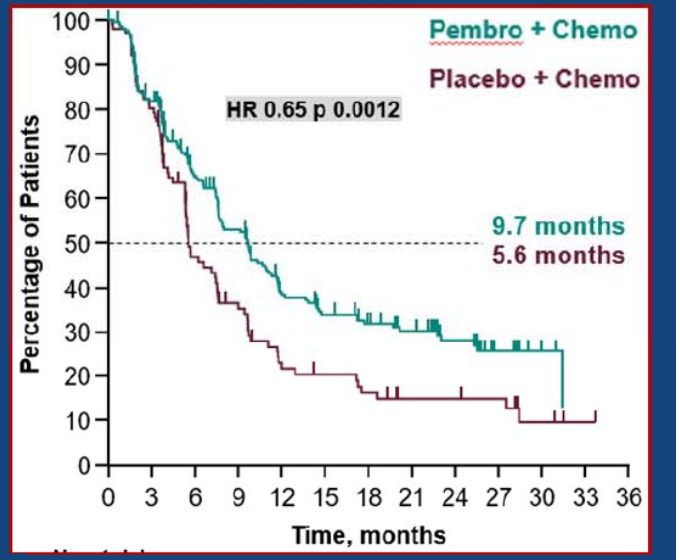
PD-L1 CPS ≥1



Prespecified *P* value boundary of 0.00111 not met

75% of pts

PD-L1 CPS ≥10



Prespecified *P* value boundary of 0.00411 met

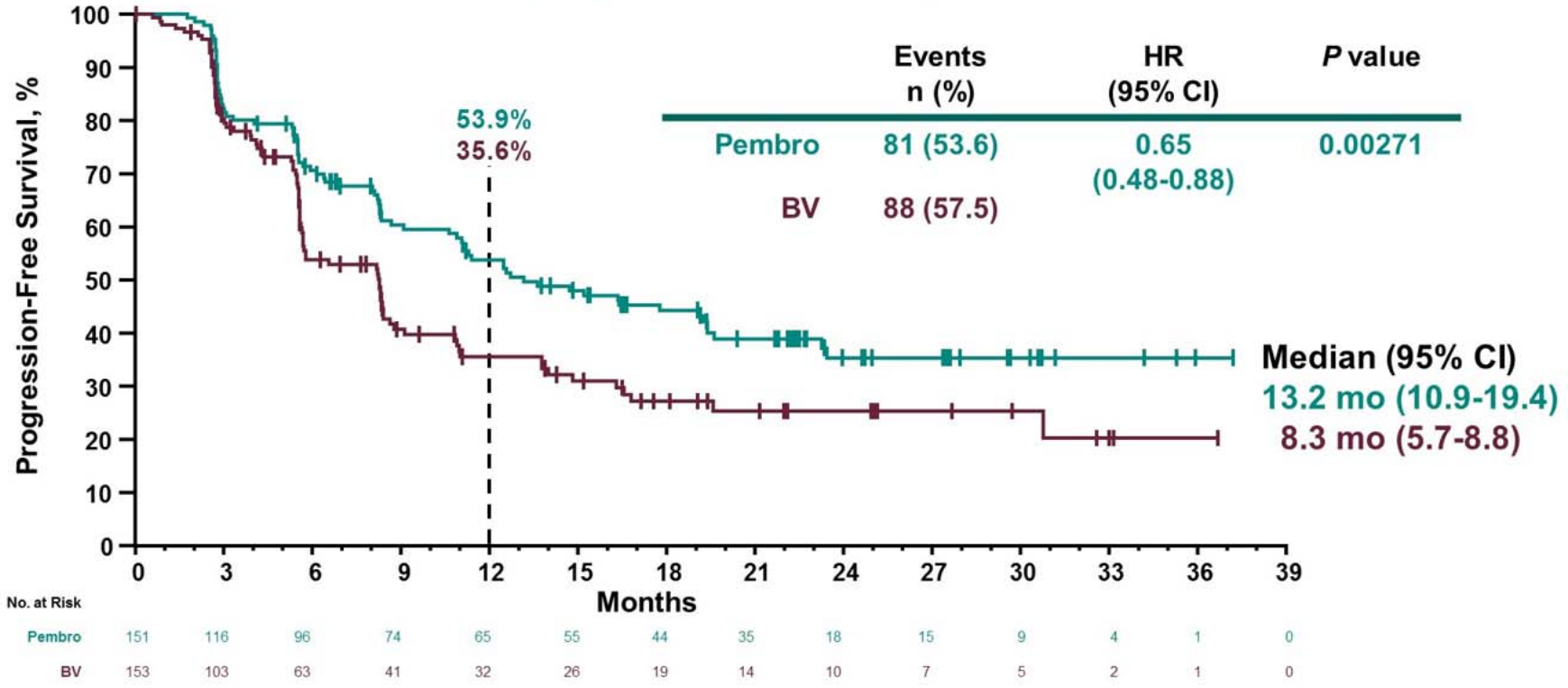
38% of pts

März 2020

- rr cHL, Pembrolizumab vs Brentuximab Vedotin, Keynote-204

rr cHL, Pembrolizumab vs Brentuximab Vedotin

März 2020



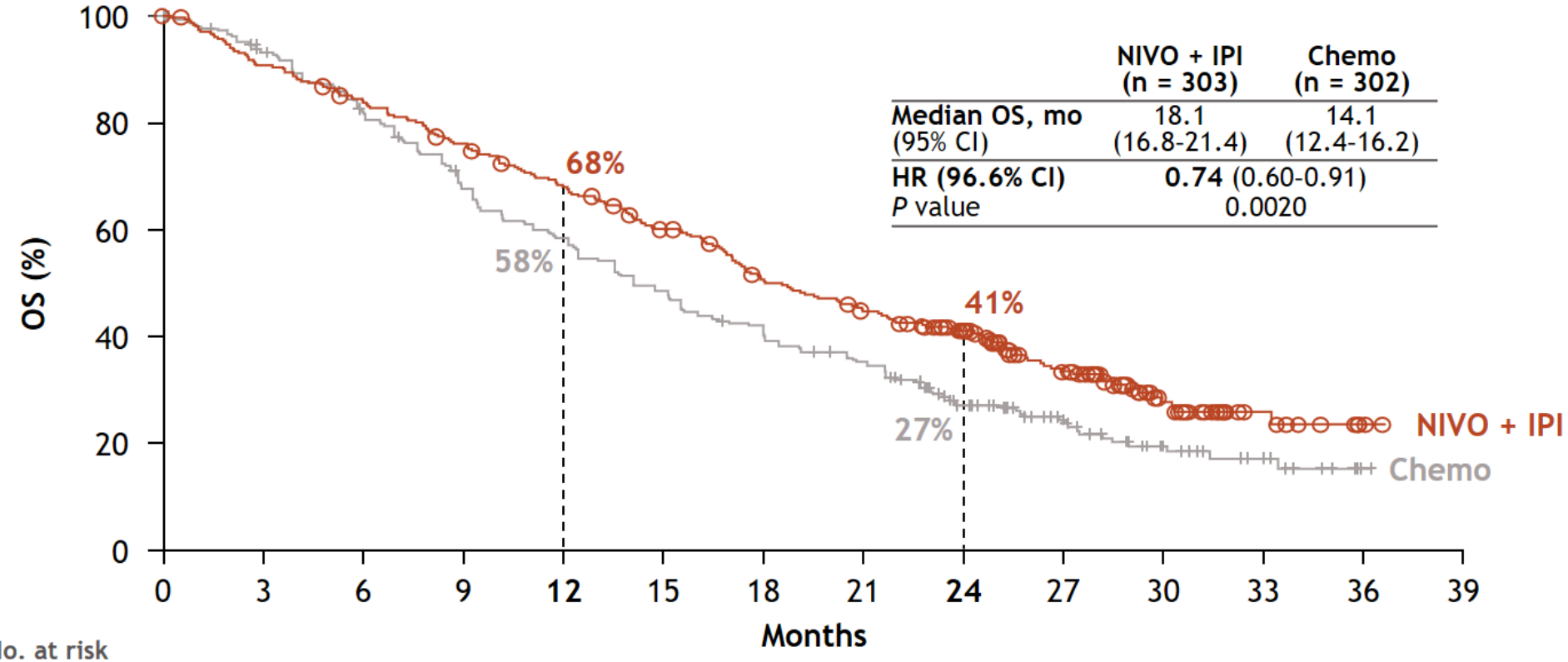
Kuruvilla et al. ASCO 2020

April 2020

- 1L MPM, Nivolumab + Ipilimumab vs CT, CheckMate-743
- 1L NSCLC PDL-1 ≥ 50%, Cemiplimab vs CT, EMPOWER-Lung 1
- 1L RCC, Nivolumab + Cabozantinib vs Sunitinib, CheckMate-9ER
- 1L CRC MSI-H, Pembrolizumab vs CT, Keynote-177

1L MPM, Nivolumab + Ipilimumab vs CT

April 2020



	NIVO + IPI (n = 303)	Chemo (n = 302)
Median OS, mo (95% CI)	18.1 (16.8-21.4)	14.1 (12.4-16.2)
HR (96.6% CI)	**0.74** (0.60-0.91)	
P value	0.0020	

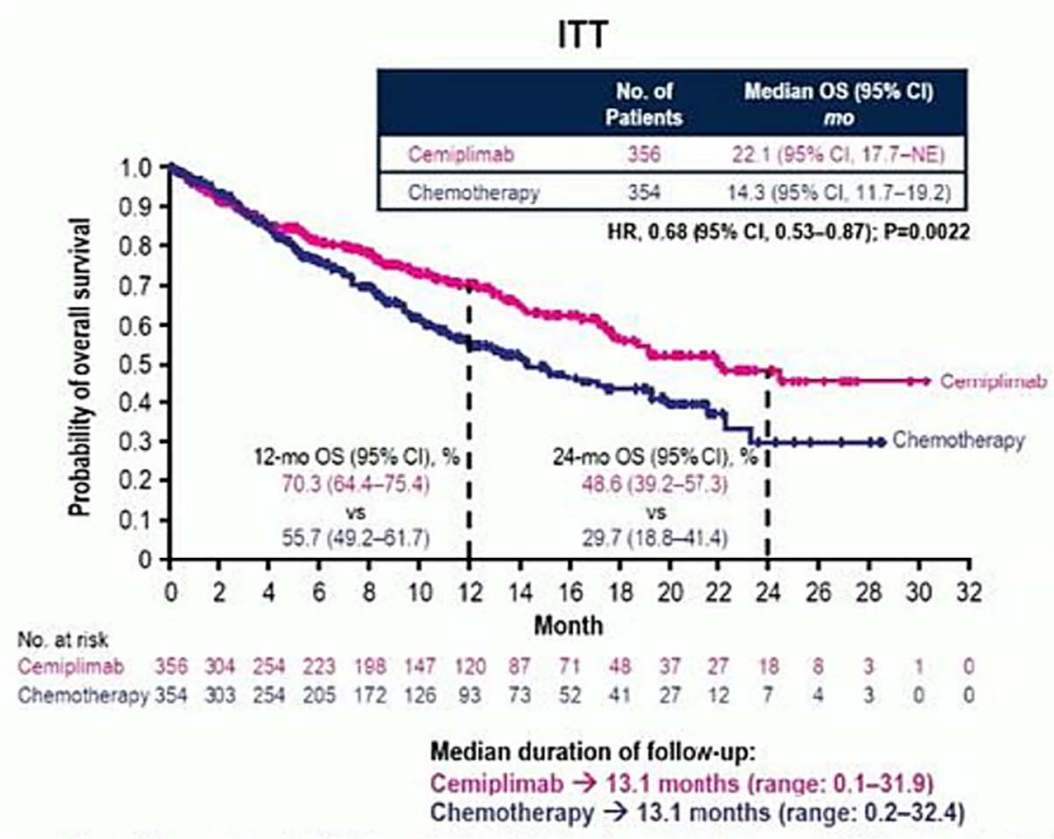
No. at risk

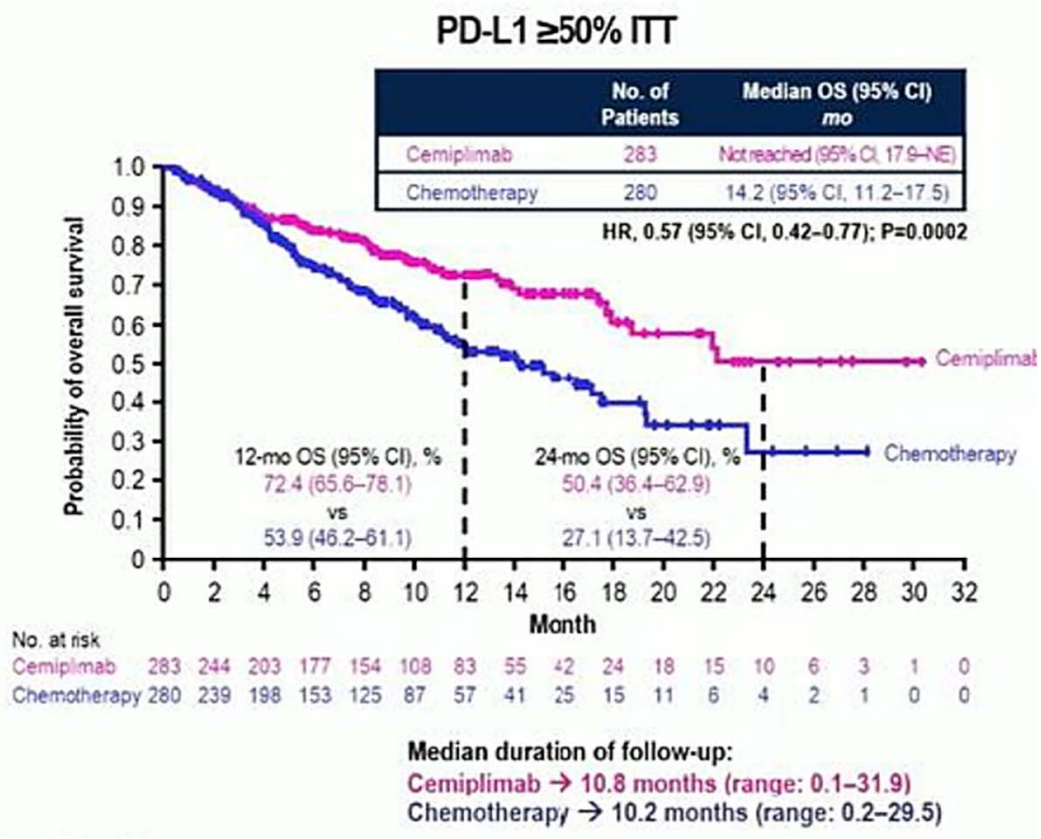
NIVO + IPI	303	273	251	226	200	173	143	124	101	65	30	11	2	0
Chemo	302	268	233	190	162	136	113	95	62	38	20	11	1	0

Baas et al. WCLC 2020

1L NSCLC PDL-1 ≥ 50%, Cemiplimab vs CT

April 2020

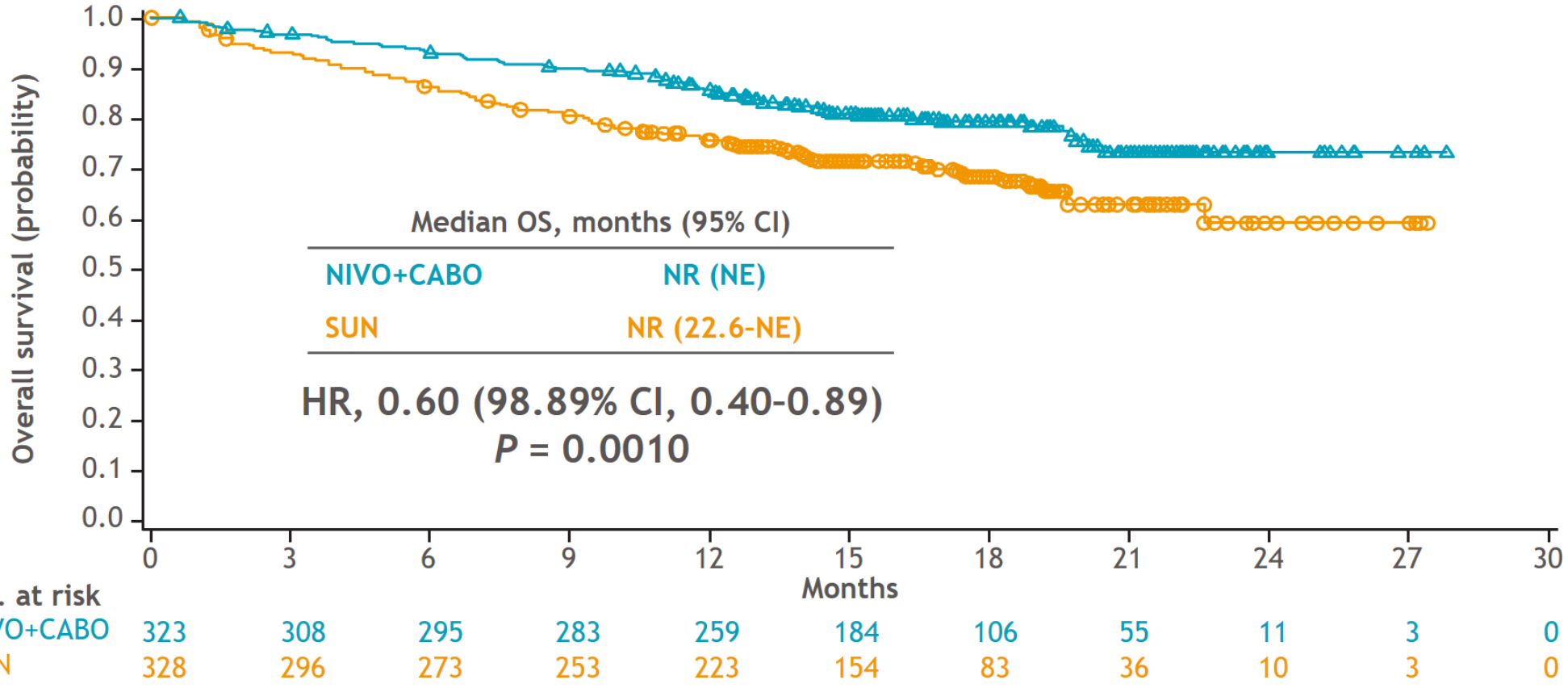




Sezer et al. ESMO 2020

1L RCC, Nivolumab + Cabozantinib vs Sunitinib

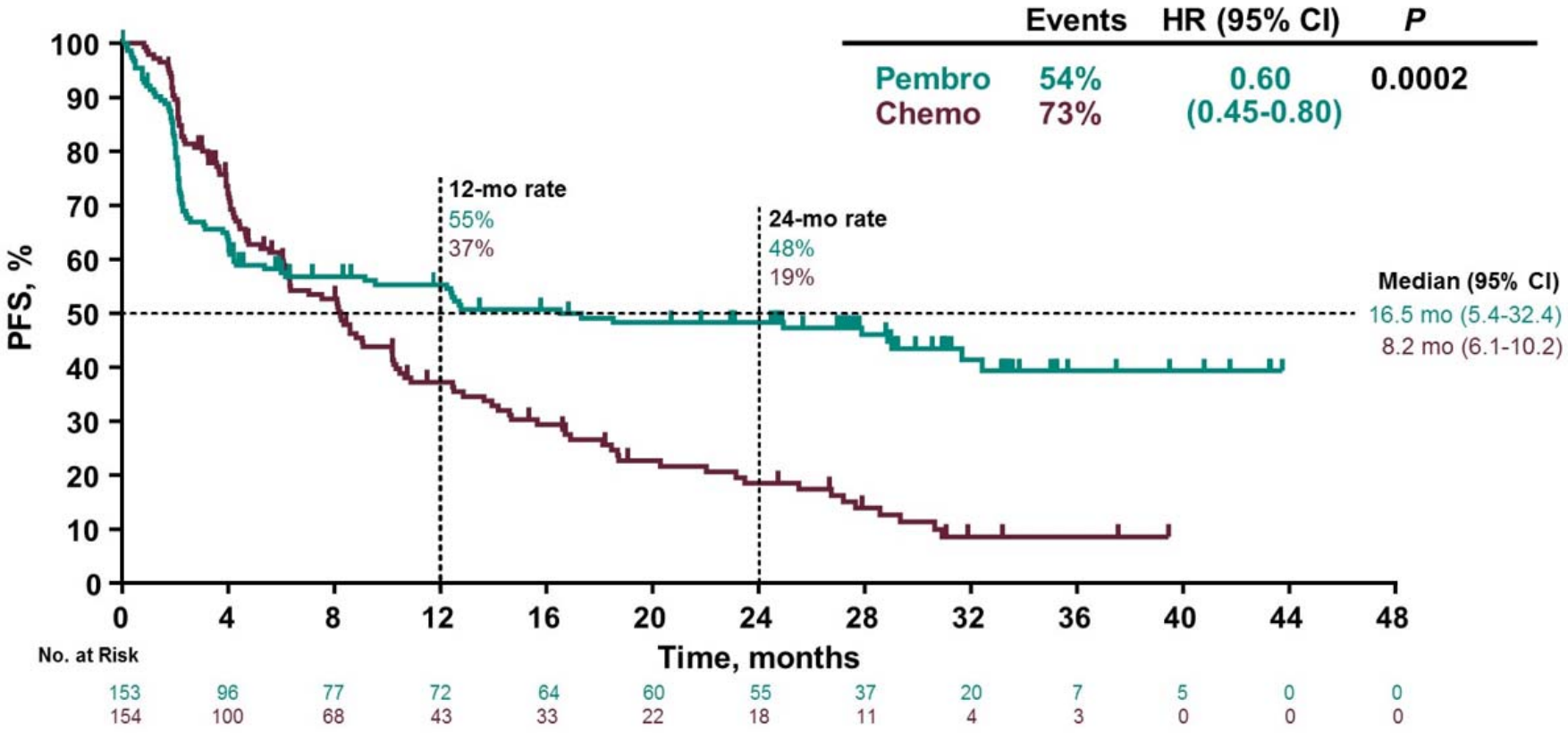
April 2020



Choueiri et al. ESMO 2020

1L CRC MSI-H, Pembrolizumab vs CT

April 2020



Andrè et al. ASCO 2020

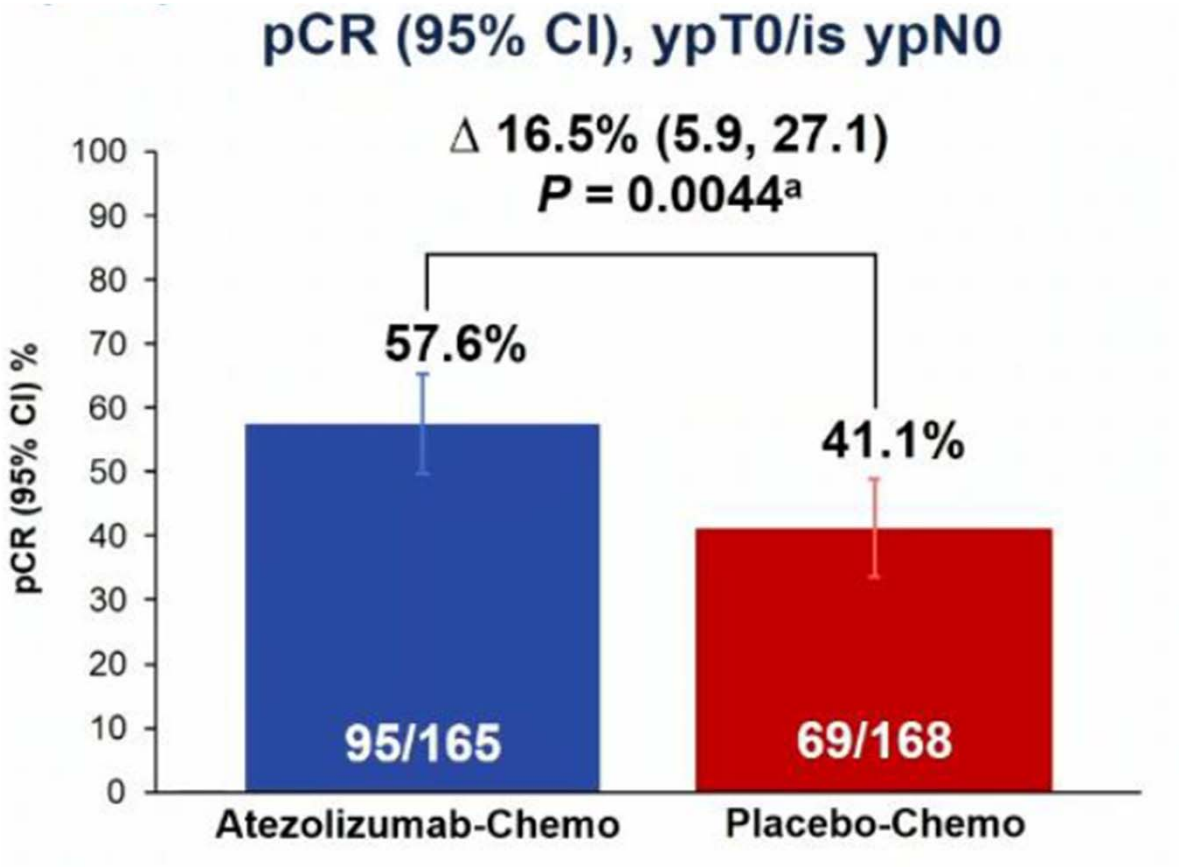
Mai 2020

Juni 2020

- Neoadjuvant TNBC, Atezolizumab + CT vs CT, IMpassion031
- 1L UC CT + Avelumab Erhaltung, JAVELIN Bladder 100

Neoadjuvant TNBC, Atezolizumab + CT vs CT

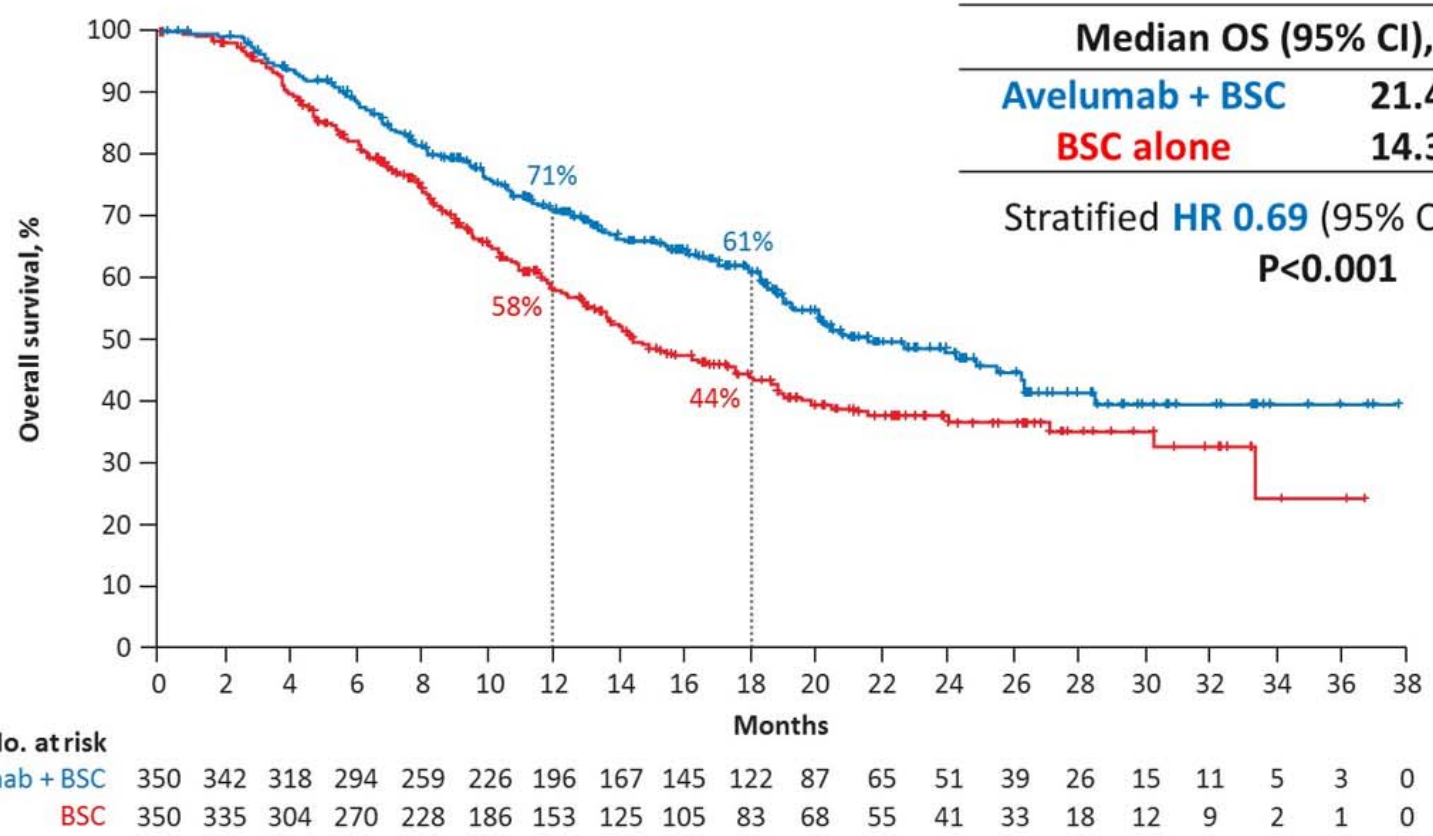
Juni 2020



Harbeck et al. ESMO 2020

1L UC CT + Avelumab Erhaltung

Juni 2020



Median OS (95% CI), months	
Avelumab + BSC	**21.4** (18.9, 26.1)
BSC alone	**14.3** (12.9, 17.9)

Stratified **HR 0.69** (95% CI, 0.56, 0.86)

P<0.001

OS was measured post randomization (after chemotherapy); the OS analysis crossed the prespecified efficacy boundary based on the alpha-spending function (P<0.0053)

Powels et al. ASCO 2020

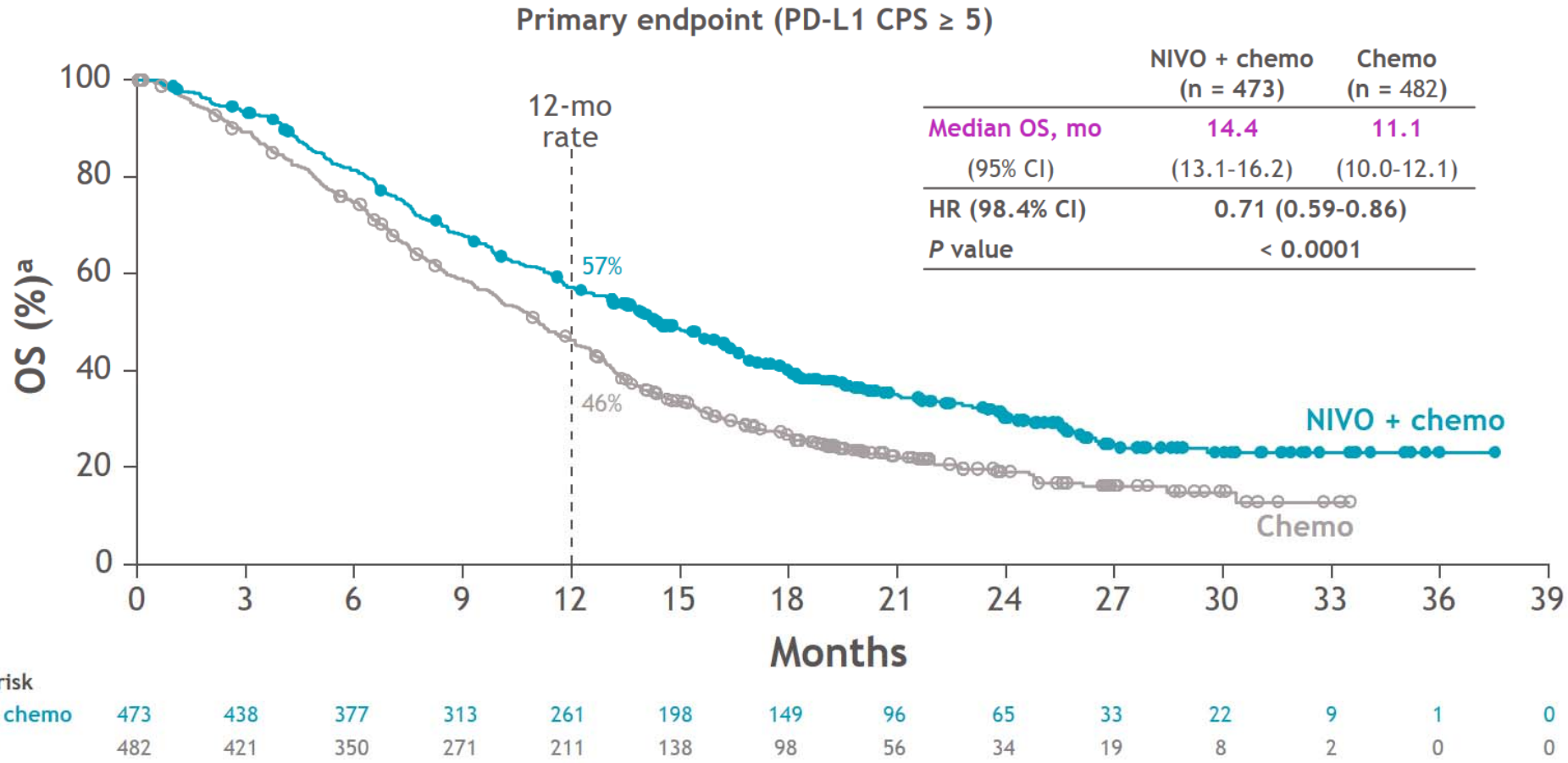
Juli 2020

August 2020

- 1L GC/GEJ/ESO Adeno, CPS ≥ 5, Nivolumab + CT vs CT, CheckMate-649
- 1L ESO/GEJ, Pembrolizumab + CT vs CT, Keynote-590
- Adjuvant ESO/GEJ, Nivolumab vs Placebo, CheckMate-577

1L GC/GEJ/ESO Adeno, CPS ≥ 5, Nivolumab + CT vs CT

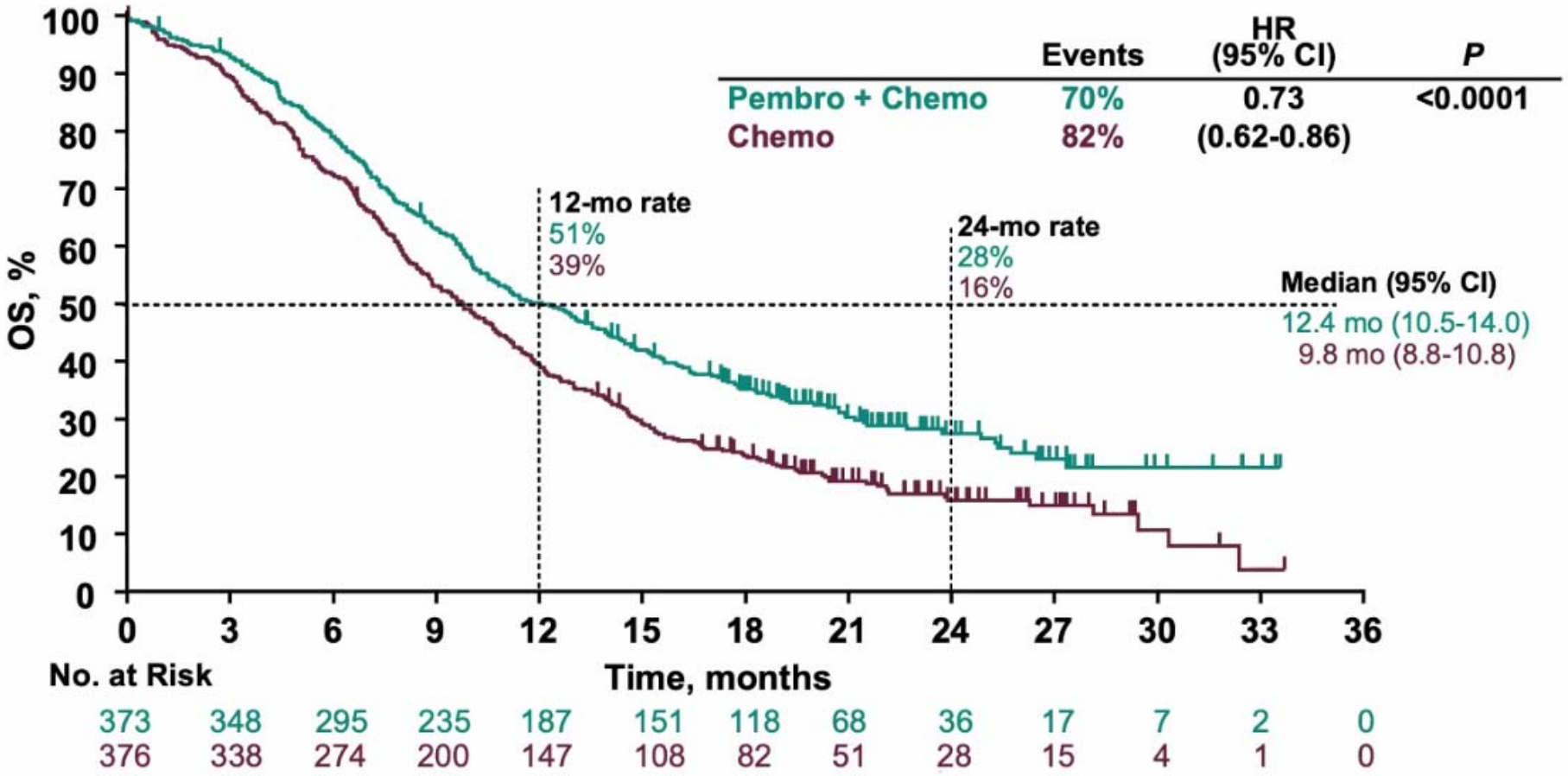
August 2020



Moehler et al. ESMO 2020

1L ESO/GEJ, Pembrolizumab + CT vs CT

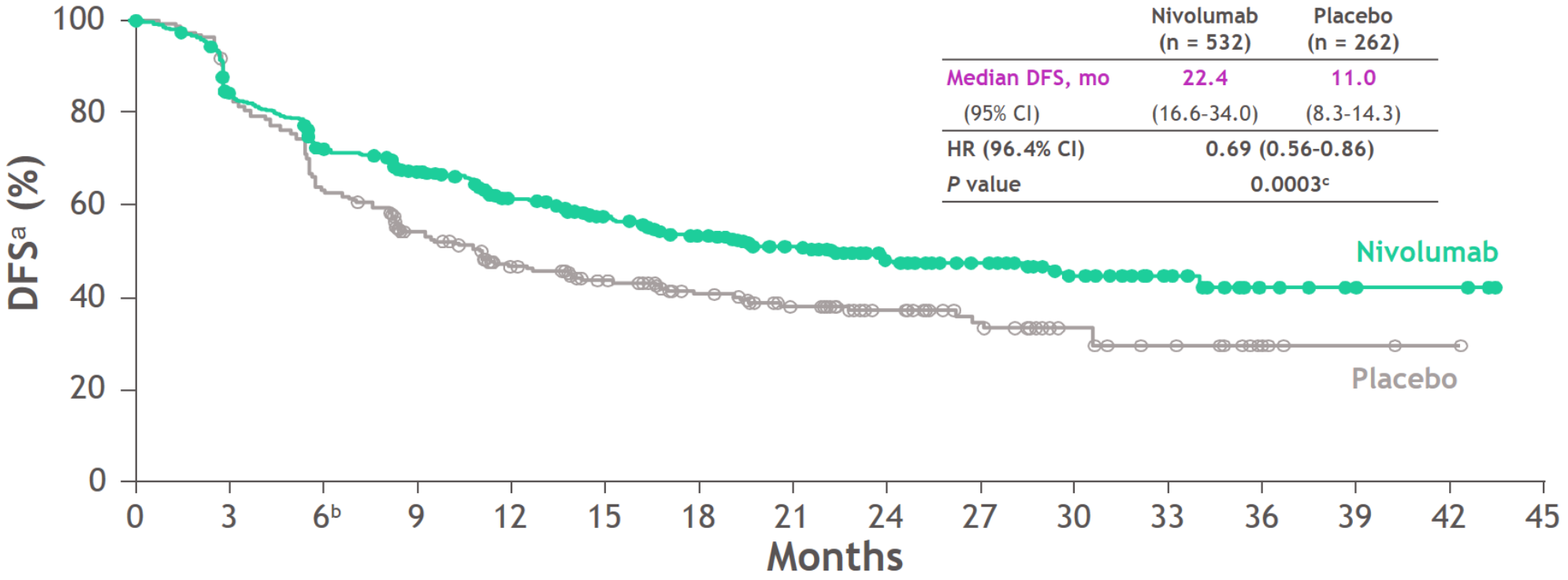
August 2020



Kato et al. ESMO 2020

Adjuvant ESO/GEJ, Nivolumab vs Placebo

August 2020



	Nivolumab (n = 532)	Placebo (n = 262)
Median DFS, mo	22.4	11.0
(95% CI)	(16.6-34.0)	(8.3-14.3)
HR (96.4% CI)	0.69 (0.56-0.86)	
P value	0.0003[c]	

No. at risk																
Nivolumab	532	430	364	306	249	212	181	147	92	68	41	22	8	4	3	0
Placebo	262	214	163	126	96	80	65	53	38	28	17	12	5	2	1	0

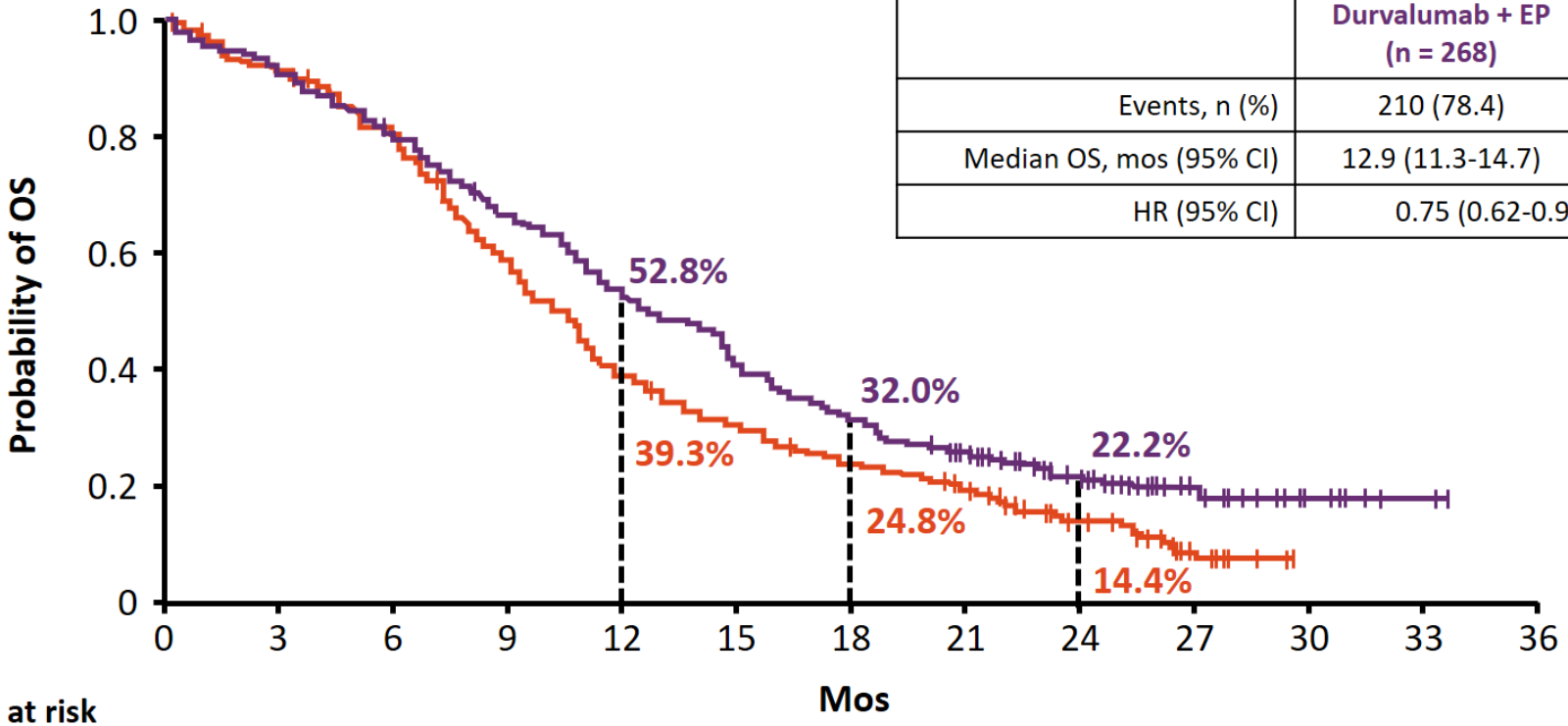
September 2020

- 1L SCLC, Durvalumab + CT, CASPIAN, **EMA approval**
- Adjuvant high-risk MIUC, Nivolumab vs Placebo, CheckMate-274

1L SCLC, Durvalumab + CT

September 2020

	Durvalumab + EP (n = 268)	EP (n = 269)
Events, n (%)	210 (78.4)	231 (85.9)
Median OS, mos (95% CI)	12.9 (11.3-14.7)	10.5 (9.3-11.2)
HR (95% CI)	0.75 (0.62-0.91); *P* = .0032	



No. at risk													
D+EP	268	244	214	177	140	109	85	66	41	21	8	2	0
EP	269	243	212	156	104	82	64	48	24	8	0	0	0

Paz-Aares et al. ASCO 2020

Adjuvant high-risk MIUC, Nivolumab vs Placebo

September 2020

Bristol Myers Squibb™

Opdivo (nivolumab) Significantly Improves Disease Free-Survival vs. Placebo as Adjuvant Therapy for Patients with High-Risk, Muscle-Invasive Urothelial Carcinoma in Phase 3 CheckMate -274 Trial

09/24/2020

In an interim analysis, CheckMate -274 met primary endpoints of disease-free survival in both all randomized patients and in patients whose tumor cells express PD-L1 ≥1%

Oktober 2020

- Neoadjuvant NSCLC, Nivolumab + CT vs CT, CheckMate-816
- 2L ESCC, Nivolumab vs CT, ATTRACTION-03/ONO-024, CHMP opinion

Neoadjuvant NSCLC, Nivolumab + CT vs CT

October 2020

Bristol Myers Squibb™

Press Release

Opdivo (nivolumab) Plus Chemotherapy Shows Statistically Significant Improvement in Pathologic Complete Response as Neoadjuvant Treatment of Resectable Non-Small Cell Lung Cancer in Phase 3 CheckMate -816 Trial

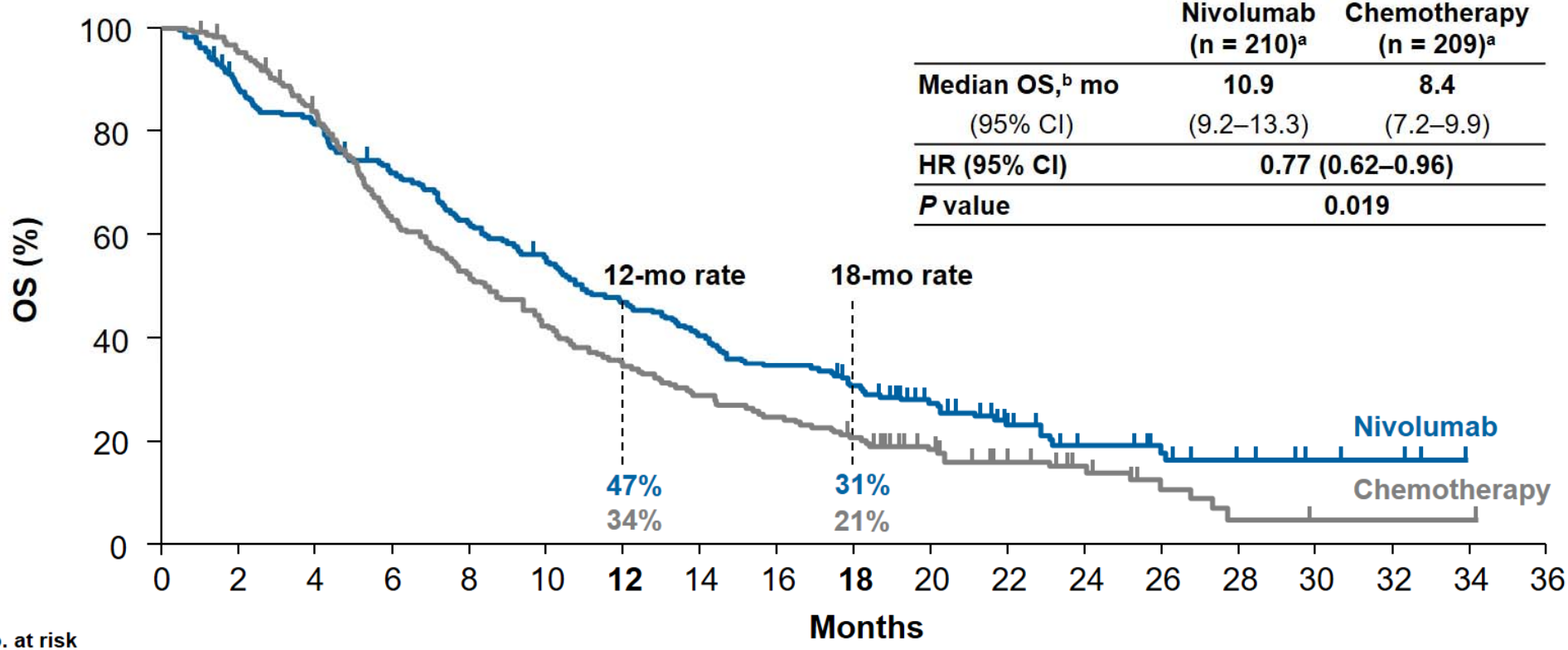
OCT 07, 2020

CheckMate -816 met a primary endpoint of improved pathologic complete response in patients who received Opdivo plus chemotherapy before surgery

2L ESCC, Nivolumab vs CT

October 2020

	Nivolumab (n = 210)[a]	Chemotherapy (n = 209)[a]
Median OS,[b] mo	**10.9**	**8.4**
(95% CI)	(9.2–13.3)	(7.2–9.9)
HR (95% CI)	**0.77 (0.62–0.96)**	
***P* value**	**0.019**	



No. at risk																			
Nivolumab	210	182	167	147	126	11	95	82	70	60	43	25	17	13	7	4	3	0	0
Chemotherapy	209	196	169	126	105	84	68	57	49	40	27	17	12	6	2	1	1	1	0

Cho et al. ESMO 2019

Negative Ph III Studien

- Adjuvant MEL, Nivolumab + Ipilimumab vs Nivolumab, CheckMate-915
- Adjuvant MIUC, Atezolizumab vs Observation, IMvigor010
- 1L UC, Pembrolizumab + CT vs CT, Keynote-361
- 1L UC, Durvalumab +/- Tremelimumab vs CT, DANUBE
- 1L TNBC, Atezolizumab + Paclizaxel vs Paclitaxel, IMpassion131

Zusammenfassung

- Vielzahl positiver Ph III Studien, einige negative
- Nivolumab und Pembrolizumab dominieren auch Highlights 2020
- Fortschritte in unterschiedlichen Tumorentitäten: LC, GI, RCC & UC, HL, TNBC, MEL, H&N
- Überwiegend Erstlinienbehandlung metastasierter Tumoren,
  vereinzelt (neo)adjuvant oder spätere Linien
- Chemotherapie bevorzugter Kombinationspartner,
  vereinzelt duale IO, TKIs, targeted therapies oder Monotherapie
- Weiterhin Bedarf an Biomarker und „cold tumors“ für 2021
- Stichtag 17.10 „nur“ 2 EMA Zulassungen 2020 (+ 3x pos. CHMP opinion)
- Vielzahl an EMA Zulassungen 2021


Bristol Myers Squibb™