1047PD Pembrolizumab for recurrent head and neck squamous cell carcinoma (HNSCC): Post hoc analyses of treatment options from the phase III KEYNOTE-040 trial

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Background: In the phase 3, randomized, open-label KEYNOTE-040 study (NCT02252042), pembrolizumab (pembro), compared with standard of care (SOC), prolonged survival in patients (pts) with recurrent and/or metastatic HNSCC that progressed during or after platinum-based therapy. Post hoc analyses were conducted to evaluate pembro vs SOC by (1) each of 3 SOC choices, (2) prior cetuximab, and (3) second PFS (PFS2; time from randomization to disease progression after initiation of new anticancer therapy).

Methods: Eligible pts (N = 495) randomly assigned (1:1) to receive pembro (200 mg every 3 weeks) or investigator choice of methotrexate (40 mg/m^2 weekly), docetaxel (75 mg/m^2 every 3 weeks), or cetuximab (400 mg/m^2 loading dose then 250 mg/m^2 weekly). Primary end point: OS; PFS and ORR were secondary end points.

Results: Outcomes for pembro vs each SOC choice are in the table. Regardless of prior cetuximab exposure, survival benefit with pembro was observed. There was a trend toward improved PFS and ORR in those with no prior cetuximab. In pts (N = 210)

with no prior cetuximab, median OS was 8.2 vs 6.9 months (mo) for pembro vs SOC (HR 0.78; 95% CI 0.56-1.07; P = 0.062), median PFS was 2.9 vs 2.3 mo (HR 0.84; 95% CI 0.62-1.15; P = 0.135), and ORR was 21.6% vs 13.0% (P = 0.076). In pts (N = 285) who had prior cetuximab, median OS was 8.4 vs 7.1 mo for pembro vs SOC (HR 0.89; 95% CI 0.68-1.16; P = 0.191), median PFS was 2.1 vs 2.3 mo (HR 1.13; 95% CI 0.88-1.46; P = 0.825), and ORR was 9.7% vs 7.9% (P = 0.354). Median PFS2 was 6.6 vs 5.4 mo for pembro vs SOC (HR 0.75; 95% CI 0.62-0.91; P = 0.002).

Table: 1047PD

	Pembro n = 247	Methotrexate n = 65	Cetuximab n = 73	Docetaxel n = 110
OS				
Median, mo	8.4	6.0	7.1	7.7
HR, pembro vs SOC (95% CI)	–	0.81 (0.59-1.11)	0.77 (0.57-1.03)	0.81 (0.62-1.05)
P value	–	0.094	0.038	0.058
PFS				
Median, mo	2.1	2.2	2.1	2.5
HR for pembro vs SOC (95% CI)	–	0.95 (0.71-1.27)	0.93 (0.70-1.23)	1.02 (0.79-1.32)
P value	–	0.352	0.299	0.557
Rate at 6 months, %	25.6	21.5	21.9	17.9
ORR				
ORR, %	14.6	6.2	11.0	11.8
Difference for pembro vs SOC (95% CI)	–	8.7 (–1.4 to 15.8)	4.5 (–5.4 to 12.0)	3.4 (–5.0 to 10.5)
P value	–	0.040	0.163	0.202

Conclusions: The trend was toward improved OS for pembro vs all 3 SOC choices, regardless of prior cetuximab exposure. PFS and ORR were improved in those who had no prior cetuximab, although this may represent a less heavily pretreated population. Pembro, compared with SOC, improved PFS2. Future analyses will evaluate subsequent therapies after initial progression.

Clinical trial identification: NCT02252042; Trial initiated: September 29, 2014.

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