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64P Safety and efficacy of immune checkpoint inhibitors (ICIs) in patients (pts) with solid tumors and cardiac metastases

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Background: Incidence of cardiac metastasis (mets) is rising among pts with cancer. Data on the safety and clinical outcomes of ICIs on pts with cardiac mets is limited.

Methods: In an international multi-center retrospective study, pts with solid tumors and mets to the heart who had received ICIs were included. Immune-related adverse events (irAEs) were graded according to CTCAE v5.0. Objective response rates (ORR) were evaluated by RECIST when available. Overall survival (OS) and progression-free survival (PFS) were calculated from time of ICI initiation using the Kaplan-Meier Method.

Results: 62 pts across 16 institutions were identified with a median follow-up of 38.4 months (mo). Melanoma (33.9%, n=21) and non-small cell lung cancer (NSCLC, 22.6%, n=14) were the most common cancers. Median age at ICI start was 65 (23-89) years and 29.0% (n=18) received combination therapy with anti-PD1/PD-L1 and anti-CTLA4, and 58.1% (n=36) received ICIs as 1st line. Most common locations of cardiac mets were the ventricles (38.7%, n=24) and atria (37.1%, n=23). At ICI initiation, 20.1% (n=13) had a cardiac thrombus. Median diameter of cardiac mass was 4 (0.5-9.0) cm. Cardiology referrals and cardiac MRIs were done on 37/62 (59.7%) and 28/62 (45.2%) pts, respectively. 33.9% had cardiac complications from cancer mets, including arterial/venous emboli (8.1%, n=5), tamponade and arrhythmias (each 6.5%, n=4). For NSCLC, ORR, PFS, and OS were 28.7% (11.7-54.6), 4.3 mo (1.5-11.2), and 9.9 mo (2.0-14.4), respectively. For melanoma, ORR, PFS, and OS were 38.1% (20.8-59.1), 7.5 mo (2.2-19.3), and 35.0 mo (5.4-62.9), respectively. Cardiac mass ORRs for NSCLC and melanoma were 21.4% (7.6-47.6) and 42.9% (24.5-63.5), respectively. irAEs are shown in the table.

Table: 64P

irAE leading to discontinuation	10 (16.1%)	
Systemic steroids	17 (27.4%)	
Any irAE	28 (45.2%)	13 (19.4%)
Cardiac	1 (1.6%)	0 (0%)
Dermatitis	8 (12.9%)	1 (3.2%)
Pneumonitis	2 (3.2%)	1 (1.6%)
Diarrhea	8 (12.9%)	3 (4.8%)

Endocrine	6 (9.7%)	1 (1.6%)
Mucositis	1 (1.6%)	0 (0%)
Neurologic	1 (1.6%)	1 (1.6%)
Hepatitis	1 (1.6%)	1 (1.6%)
Other	8 (12.9%)	2 (3.2%)

Conclusions: Cardiac mets are frequently associated with cardiac complications. ICIs have activity in cardiac mets and are safe.

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However, first draft frequently initiated by myself when I am 1st author: Medical Communication; Non-Financial Interests, Personal, Member: ASCO, AACR; Non-Financial Interests, Personal, Other, Political vote usually as "independent", not a member of any political party. I am an issue voter: General US Politics; Other, Personal, Other, No financial interest. Institutional.Filed patents related to biomarkers of immune checkpoint blockers, and circulating free methylated DNA. No money made and some patents were abandoned: Filed patents; Other, Personal, Other, Employee at DFCL. Please see <https://www.dana-farber.org/> for mission statement (non-profit hospital). I am also the past President of Medical Staff at DFCL 2015-2018: Dana-Farber Cancer Institute (DFCI); Other, Personal, Other, Professor at HMS, Please see <https://hms.harvard.edu/> for mission statement (non-profit school): Harvard Medical School (HMS). All other authors have declared no conflicts of interest.

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65P Atezolizumab plus bevacizumab versus lenvatinib for unresectable hepatocellular carcinoma: A large real life worldwide population

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