1265 VEDOLIZUMAB PLUS ANTI-PD1 ANTIBODY IN ADVANCED MELANOMA PATIENTS WITH INFLAMMATORY ENTEROCOLITIS

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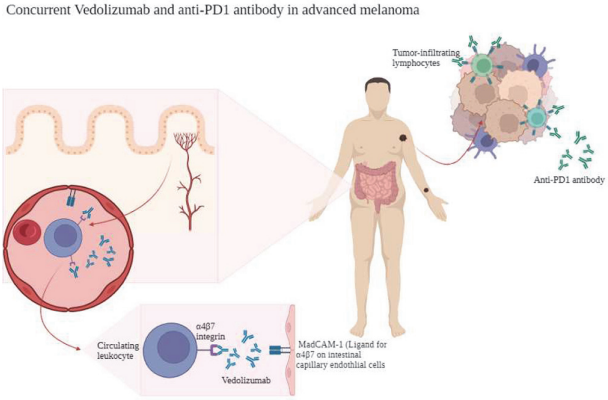
Background Use of immune checkpoint inhibitors in advanced melanoma is challenging in patients with a history of immune therapy related colitis or pre-existing inflammatory bowel disease (Crohn's disease or ulcerative colitis).[1] Vedolizumab is a gut-selective, anti-integrin antibody that binds to the α4β7 integrin on circulating leukocytes and inhibits their trafficking into the intestinal epithelium (figure 1).[2] There is limited clinical experience of using Vedolizumab in combination with anti-PD1 antibody in melanoma patients with inflammatory enterocolitis.[3] We present outcomes of a cohort of advanced melanoma patients with inflammatory enterocolitis who concurrently received Vedolizumab and anti-PD1 antibody.

Methods In this retrospective single-institution study, records of advanced melanoma patients with a history of inflammatory enterocolitis were reviewed. Patients who received anti-PD1 antibody (Pembrolizumab, Nivolumab), concurrently with Vedolizumab were selected for analysis.

Results Nine patients with stage III/IV cutaneous melanoma and pre-existing enterocolitis received Vedolizumab plus anti-PD1 antibody (table 1). A total of 96 doses of anti-PD1 antibody were administered concurrently with Vedolizumab (56 doses), with each patient receiving at least 7 doses of anti-PD1 antibody. Vedolizumab was administered intravenously (300 mg at weeks 0, 2 and 6 weeks and then every 8 weeks) along with Pembrolizumab (200 mg every 3 weeks) or Nivolumab (240 mg every 2 weeks or 480 mg every 4 weeks). Patients had a history of grade 3-4 colitis from prior check-point inhibitor therapy (n=4), Crohn's disease (n= 4), and ulcerative colitis (n= 1). Seven patients were negative for BRAF V600 mutation. Six patients had no recurrence of colitis symptoms while on anti-PD1 antibody therapy. Three patients with recurrence of colitis had a prior history of Crohn's disease (n=2), and grade 3 check-point inhibitor related colitis (n=1). All patients with recurrence of colitis symptoms did not have melanoma progression while receiving Vedolizumab plus anti-PD1 antibody. Overall, seven patients did not experience melanoma progression on therapy. One patient had a complete response. Two patients were able to complete adjuvant treatment with anti-PD1 antibody, without melanoma recurrence on follow-up. Vedolizumab infusions were well tolerated, and no treatment related side effects were noted.

Conclusions Concurrent Vedolizumab appears to allow treatment with anti-PD1 antibody in advanced melanoma patients with pre-existing inflammatory enterocolitis. Prospective studies are needed to definitively determine the safety and anti-melanoma efficacy of this combination.

Ethics Approval This study was reviewed and approved by the University of Iowa Institutional Review Board IRB 01, under IRB# 202202583. A waiver of informed consent was granted by the IRB per 45 CFR 46.116 (f)(3)



Abstract 1265 Figure 1 Concurrent Vedolizumab plus anti-PD1 in advanced melanoma

Abstract 1265 Table 1 Advanced melanoma patients with inflammatory enterocolitis receiving Vedolizumab plus anti-PD1 therapy

Patient	Melanoma stage	Pre-existing enterocolitis	No. of PD-1 Ab doses	No. of Vedolizumab doses	Recurrence of colitis	Objective Response on therapy
1	IIIB	UC	14	7	No	No recurrence
2	IV*	CD	16	7	No	No recurrence
3	IV	ICI Colitis (G3)	8	6	No	SD
4	IV	ICI Colitis (G4)	9	6	No	SD
5	IV	CD	7	2	No	PD
6	IV	ICI Colitis (G4)	12	7	No	PD
7	IV	CD	7	5	Yes	SD
8	IV	CD	13	10	Yes	CR
9	IV	ICI Colitis (G3)	10	6	Yes	SD

*Patient had surgical resection of metastasis and received adjuvant immune therapy

CD: Crohn's Disease; ICI: Immune check-point inhibitory; UC: Ulcerative colitis; CR: Complete Response; PD: Progressive disease; SD: Stable Disease

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