

A-356 - Effects of age on treatment in patients with cutaneous melanoma - a multicentre analysis from the ADOREG Registry [Abstract]

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lichenoid reactions often present atypically, reflecting the diverse clinical patterns of immune dysregulation and are thought to result from enhanced activity of Th1 and Th17 effector T-cells.

Lichen planus (LP) typically affects flexural and dorsal surfaces of the upper limbs, shins, and the lower back, with frequent oral mucosal involvement. Our case is notable for its atypical umbilical presentation. While Koebner phenomenon was considered, it was deemed unlikely as other scars remained unaffected. The PD-1 signalling pathway modulates cytokine production, including IFN- γ , IL-2, IL-17, and TNF- α , which are key mediators of immune dysregulation in LP and psoriasis, suggesting potential mechanistic overlap.

Umbilical involvement in lichen planus is exceedingly rare, with only three cases reported in the literature, including one instance of nivolumab-induced umbilical LP[2]. We describe a second case of checkpoint-inhibitor-induced umbilical LP, adding to the limited but growing evidence of this uncommon manifestation.

Checkpoint-inhibitor therapy has revolutionized cancer treatment, but its immune-related side effects require timely recognition and management to prevent severe outcomes. Increasing reports of atypical lichenoid reactions highlight the spectrum of these events. Our report adds evidence of umbilical/psoriasiform LP as a distinct clinical pattern, highlighting the importance of awareness among oncologists and dermatologists.

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Keywords: pembrolizumab, lichen planus, immunotherapy, checkpoint inhibitors, immunotoxicity

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A-346

Immune checkpoint inhibitor associated bullous pemphigoid: A single-centre retrospective study

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Background: Immune-checkpoint inhibitors (ICIs) have revolutionized cancer therapy over the past decade. Among immune-related adverse events (irAEs) associated with ICIs, cutaneous manifestations are common. These range from mild pruritus to autoimmune blistering diseases like bullous pemphigoid (BP). BP, though relatively rare, can represent a severe irAE often necessitating treatment discontinuation. Despite its significance, relevant literature remains limited.

Methods: We conducted a retrospective review of patient charts from our supportive dermato-oncology clinic, including cases of BP that occurred between 2018 and 2024. The diagnosis of BP was established using clinical, histological, and, where necessary, immunological criteria. We extracted and analyzed demographic data, disease characteristics, and treatment outcomes.

Results: A total of 33 patients (23 males) were identified. The primary indication for ICI therapy was lung cancer (57.6%), and pembrolizumab (48.5%) was the most commonly used ICI. The mean age at BP onset was 71.3 years, with a mean interval of 15.1 months between ICI initiation and BP appearance. Late-onset BP (>6 months after ICI initiation) occurred in 66.7% of patients. Eight patients presented with mucosal involvement, and two had preexisting BP that worsened after ICI initiation. One patient developed peristomal BP on colostomy-adjacent skin, and in two cases, BP emerged after altering ICI dosing from biweekly to a double dose every four weeks. Systemic corticosteroid (initial dose of 0.5mg/kg) monotherapy was the first-line treatment for 29 patients. Among these, three required methotrexate and one required azathioprine alongside oral steroids. All systemic therapy recipients were advised to use over-the-counter topical corticosteroids as adjunctive therapy. In four cases with limited disease, topical corticosteroids alone were initially used, but three required escalation to systemic therapy. Only three patients permanently discontinued ICIs due to BP severity, while four resumed ICI therapy after BP management.

Conclusions: ICI-associated BP can generally be managed effectively with systemic corticosteroids, often allowing continuation of ICIs. Early recognition and appropriate management, including the use of immunosuppressive agents in severe cases, are crucial. BP may manifest many months after ICI initiation, underscoring the need for sustained vigilance in diagnosis and treatment.

Keywords: Immune checkpoint inhibitors; bullous pemphigoid

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A-356

Effects of age on treatment in patients with cutaneous melanoma-A multicentre analysis from the ADOREG Registry

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Background: In elderly patients with cutaneous melanoma (CM) treatment for primary tumors and advanced stages is often limited due to comorbidities. We analysed the frequency and efficacy of primary treatment and systemic therapy in patients with CM, especially those of immune checkpoint inhibitors (ICI).

Methods: This retrospective multicenter study of the skin cancer registry ADOREG of the German Dermatologic Cooperative Oncology Group included patients diagnosed between 01/2013 and 12/2023 receiving systemic therapy for advanced CM (aCM). Study endpoints were best overall response (BOR), progression-free survival (PFS), melanoma-specific survival (MSS) and ICI-associated side effects.

Results: 8,213 patients from 54 clinical centers with a follow-up time of ≥ 6 months were included. Patients < 75 years were compared to those ≥ 75 years. The older patient's group consisted of a higher number of males, comorbidities, CM in sun-exposed areas, lentigo maligna and nodular subtypes, increased tumor thickness and ulcerated CM (all: $p < 0.001$). Older patients received less SLNB and in aCM, less surgery, radiotherapy and systemic treatment (all: $p < 0.01$). The median number of treatment lines was lower in older patients (1.6 vs 2.1), whereas the treatment with ICI at any line showed no difference. Patients ≥ 75 years had a worse ECOG status ($p < 0.001$) and received predominantly ICI monotherapy (65.1% vs 36.3%), younger patients received more ICI combination (34.9% vs 16.2%, $p < 0.001$). Concerning 1st line therapy, no difference was seen for BOR of any kind of treatment ($p = 0.306$), nor under ICI ($p = 0.202$). For ICI, ORR was 25.8% for patients < 75 years and 29.5% for those ≥ 75 years, progressive disease was seen in 35.2% of older patients vs 30.4% of younger patients ($p = 0.202$). Younger patients experienced more frequent and severe side effects with ICI (even mono), while older patients stopped treatment more frequently due to comorbidities and at their own request ($p < 0.001$).

The median follow-up time was longer in patients < 75 years (33 vs 26 months, $p < 0.001$). The 3-year MSS was 61% for the group < 75 years and 62% for patients ≥ 75 years ($p = 0.628$).

Conclusions: Patients ≥ 75 years with aCM received surgery and systemic treatment less often, but started systemic therapy predominantly with ICI (81.5% vs 71.0%). The BOR to ICI did not differ in both groups, toxicity was higher in younger patients, older patients stopped treatment more often due to comorbidities.

Keywords: Melanoma, age, immune Checkpoint inhibition, outcome

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A-360

Early deaths resulting from immunotherapy in the treatment of melanoma

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Background: Immunotherapy is widely applied in the management of high-risk and advanced melanoma, resulting in significant advancements in clinical outcomes. Nonetheless, immune checkpoint inhibitors are frequently linked to diverse immune-related adverse events (irAEs) and, in rare instances, may result in fatal outcomes.

Methods: This retrospective study included all cases of patients treated with immunotherapy for melanoma at the National Research Institute of Oncology in Warsaw between 2012 and 2024. Patients who died within 12 weeks of treatment initiation were selected. Medical records were reviewed, and information regarding the cause of death was documented. Data on patient demographics, type of immunotherapy, and the type and dynamics of toxicity (in cases of death due to toxicity) were summarized.

Results: A total of 1973 melanoma patients treated with immune checkpoint inhibitors PD-1 and/or CTLA-4 were analyzed. Within the first 12 weeks of treatment, 296 patients died (15%), the majority of whom were men ($n = 176$). The most common cause of death was melanoma progression (92%), while fatalities related to immune-related adverse events (irAEs) were reported in 14 patients (5%) and in 10 patients the cause was different (e.g. infections, comorbidities, accidents). The majority of patients who died from treatment-related toxicity were receiving monotherapy with pembrolizumab or nivolumab ($n = 12$). Deaths related to immune therapy toxicity most often occurred after the first dose of treatment ($n = 10$). The mean age of patients who died from treatment-related toxicity was 74 years (SD 14.9), compared to 62 years (SD 15.4) for those who succumbed to melanoma progression. The most common treatment-related cause of death was cardiotoxicity ($n = 4$), followed by pulmonary toxicity ($n = 4$), hepatotoxicity ($n = 2$), and multi-organ toxicity ($n = 2$).

Conclusions: The findings of this large cohort analysis indicate that immunotherapy remains a safe treatment option with a low risk of mortality. The primary cause of death was melanoma progression, and early disease progression leading to fatal outcomes is relatively common. Early mortality associated with immunotherapy is particularly notable among elderly patients. A heightened risk of death is associated with cardiotoxicity during treatment. Effective management of cardiotoxicity may necessitate comprehensive care and a multidisciplinary approach for patients suspected of experiencing this immunotherapy-related complication.

Keywords: Melanoma, immunotherapy, immune-related adverse events (irAEs), cardiotoxicity, mortality

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