

**Pembrolizumab: An unlikely cause of Type-1 Diabetes?**Arham Iqbal,<sup>1</sup> Unzela Iqbal,<sup>2</sup> Zaeem Ahmed Abbasi<sup>3</sup>

Madam, Pembrolizumab side effects have affected 60% of the patients. Some of these side effects include thyroid dysfunction, hepatitis and pneumonitis and Auto-immune diabetes which can prove to be dangerous in pandemic times.<sup>1</sup> If not kept in check, endocrine dysfunction can be life-threatening.

Recent studies showed that Pembrolizumab, when administered to patients previously on Ipilimumab can aggravate autoimmune diabetes.<sup>2</sup> Another case reported that a 70 years old patient was found suffering from liver and lung malignancies and later diagnosed with induced Diabetic ketoacidosis and isolated adrenocorticotrophic hormone deficiency after being administered with both Ipilimumab and Pembrolizumab as part of treating the malignancies.<sup>3</sup> Another study which was conducted recently showed that within 3 months of administering PD-1/PD-L1 inhibitor, the patients developed Type 1 Diabetes rapidly along with a higher incidence of ketoacidosis.<sup>4</sup>

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**DOI:** <https://doi.org/10.47391/JPMA.4399>

In light of the above evidence, health care professionals should be aware of this rare, life-threatening side effect of Pembrolizumab. Strict monitoring of patients' blood glucose levels to whom Pembrolizumab is being administered should be done along with the history of any other PD-1/PD-L1 inhibitor that was administered before.

**Keywords:** Pembrolizumab, Immunotherapy, Endocrine dysfunction, Type I diabetes.

**Disclaimer:** None to declare.

**Conflict of Interest:** The authors declare no conflict of interest.

**Funding Sources:** None to declare.

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