

**Supplementary Table S1.** Records identified with the literature search through databases.

Database	Search strategy	Records Identified
	MeSH terms/Search terms	
PubMed	Body mass index Obesity Immunotherapy Ipilimumab Nivolumab Pembrolizumab Atezolizumab Durvalumab Avelumab Melanoma Carcinoma, non small-cell lung Carcinoma, renal cell Urologic neoplasms Neoplasms	450
Scopus	Body mass index Obesity Immunotherapy anti-CTLA4 anti-PD1 anti-PD-L1 Ipilimumab Nivolumab Pembrolizumab Atezolizumab Durvalumab Avelumab Melanoma Carcinoma, non small-cell lung Urothelial tumor Carcinoma, renal cell Cancer Outcome	303

<p>Web of Science</p>	<p>Body mass index  Obesity  Immunotherapy  anti-CTLA4  anti-PD1  anti-PD-L1  Ipilimumab  Nivolumab  Pembrolizumab  Atezolizumab  Durvalumab  Avelumab  Melanoma  Carcinoma, non small-cell lung  Urothelial tumor  Carcinoma, renal cell  Cancer  Outcome</p>	<p>150</p>
<p>Embase</p>	<p>Body mass index  Obesity  Immunotherapy  Ipilimumab  Nivolumab  Pembrolizumab  Atezolizumab  Durvalumab  Avelumab  Melanoma  Carcinoma, non small-cell lung  Carcinoma, renal cell  Urologic neoplasms  Neoplasms</p>	<p>252</p>
<p>Cochrane Central</p>	<p>Body mass index  Obesity  Immunotherapy  Ipilimumab  Nivolumab  Pembrolizumab  Atezolizumab</p>	<p>270</p>

	Durvalumab Avelumab Melanoma Carcinoma, non small-cell lung Carcinoma, renal cell Urologic neoplasms Neoplasms	
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