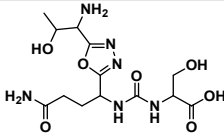
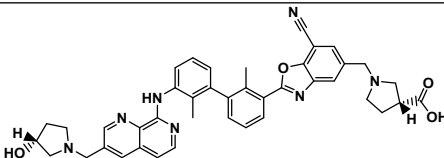
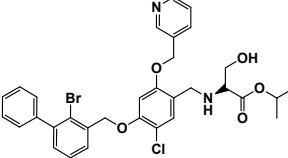
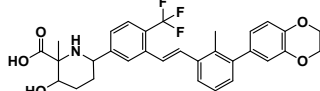


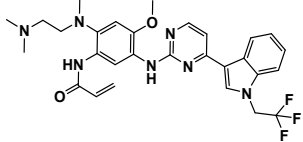
Table S1. PD-1 and PD-L1 FDA approved ICIs¹.

Target	ICIs	Brand name/ Marketed by	First approval date	Indications
PD-1	Pembrolizumab	Keytruda/ Merck	2014	Melanoma Breast cancer NSCLC ¹
	Nivolumab	Opdivo/ Bristol- Meyers Squibb	2014	Melanoma NSCLC ¹ Head and neck cancer Renal-cell cancer
	Cemiplimab	Libtayo/ Regeneron, Sanofi	2018	Cutaneous squamous- cell cancer NSCLC ¹
	Dostarlimab	Jemperli/ GlaxoSmithKline LLC	2021	Endometrial cancer and recurrent or advanced solid tumors
	Toripalimab	Loqtorzi/ Coherus Biosciences Inc.	2023	Melanoma
PD-L1	Atezolizumab	Tecentriq/ Genentech Inc., Roche	2016	Urothelial cancer
	Durvalumab	Imfinzi/ AstraZeneca	2017	Urothelial carcinoma NSCLC ¹
	Avelumab	Bavencio/ Merck, Pfizer	2017	Urothelial carcinoma Merkel-cell carcinoma Renal-cell cancer

¹Non-small cell lung cancer.

Table S2. Small molecule ICIs (3-8) targeting PD-1/PD-L1 in clinical trials².

Compound	Chemical structure	Clinical state	NCT Code	Indications
CA-170 (3)		Phase 1	NCT02812875	Advanced solid tumors or lymphomas
INCB086550 (4)		Phase 1 Phase 2	NCT03762447 NCT04629339	Solid tumors
IMMH-010 (5)		Phase 1	NCT04343859	Advanced solid tumors
MAX-10181 (6)		Phase 1	NCT05196360 NCT04122339	Advanced solid tumors

BPI-371153 (7)		Phase 1	NCT05341557	Advanced Solid Tumors or Relapsed/ Refractory Lymphoma
ASC61 (8)	--- ¹	Phase 1	NCT05287399	Advanced solid tumors

¹Unknown structure.

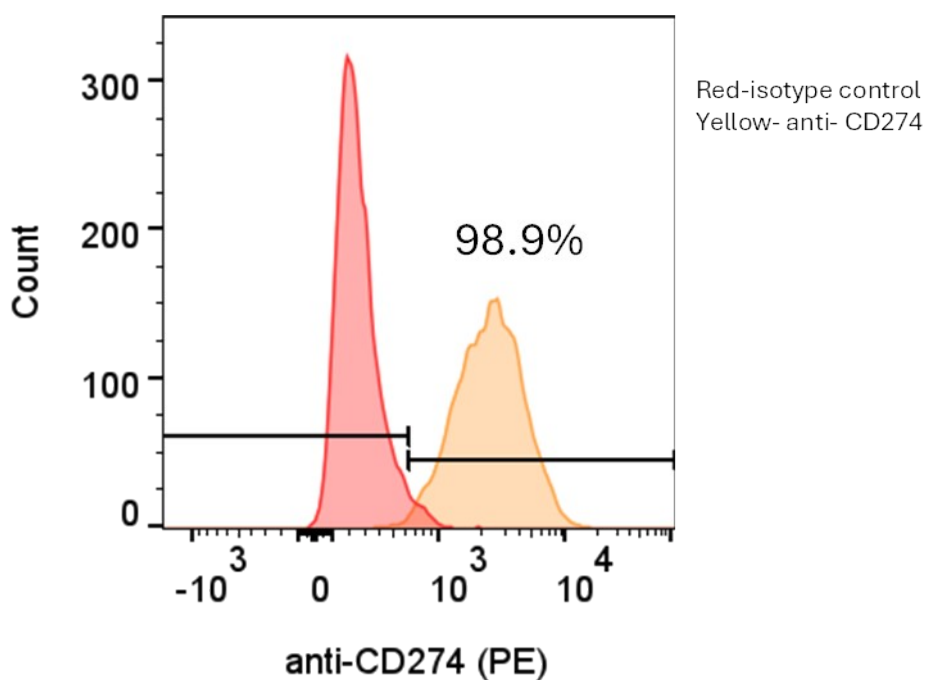


Fig. S1- MDA-MB-231 expresses PD-L1. Representative histogram from of MDA-MB-231 stained with anti-CD274 (PE) to assess PD-L1 expression levels by flow cytometry.

(1) *Drugs@FDA: FDA-Approved Drugs.* . 2024.

<https://www.fda.gov/drugs/development-approval-process-drugs/drug-approvals-and-databases> (accessed May 2024).

(2) *The ClinicalTrials.gov results database.* <https://clinicaltrials.gov/> (accessed 2024 May 2024).