

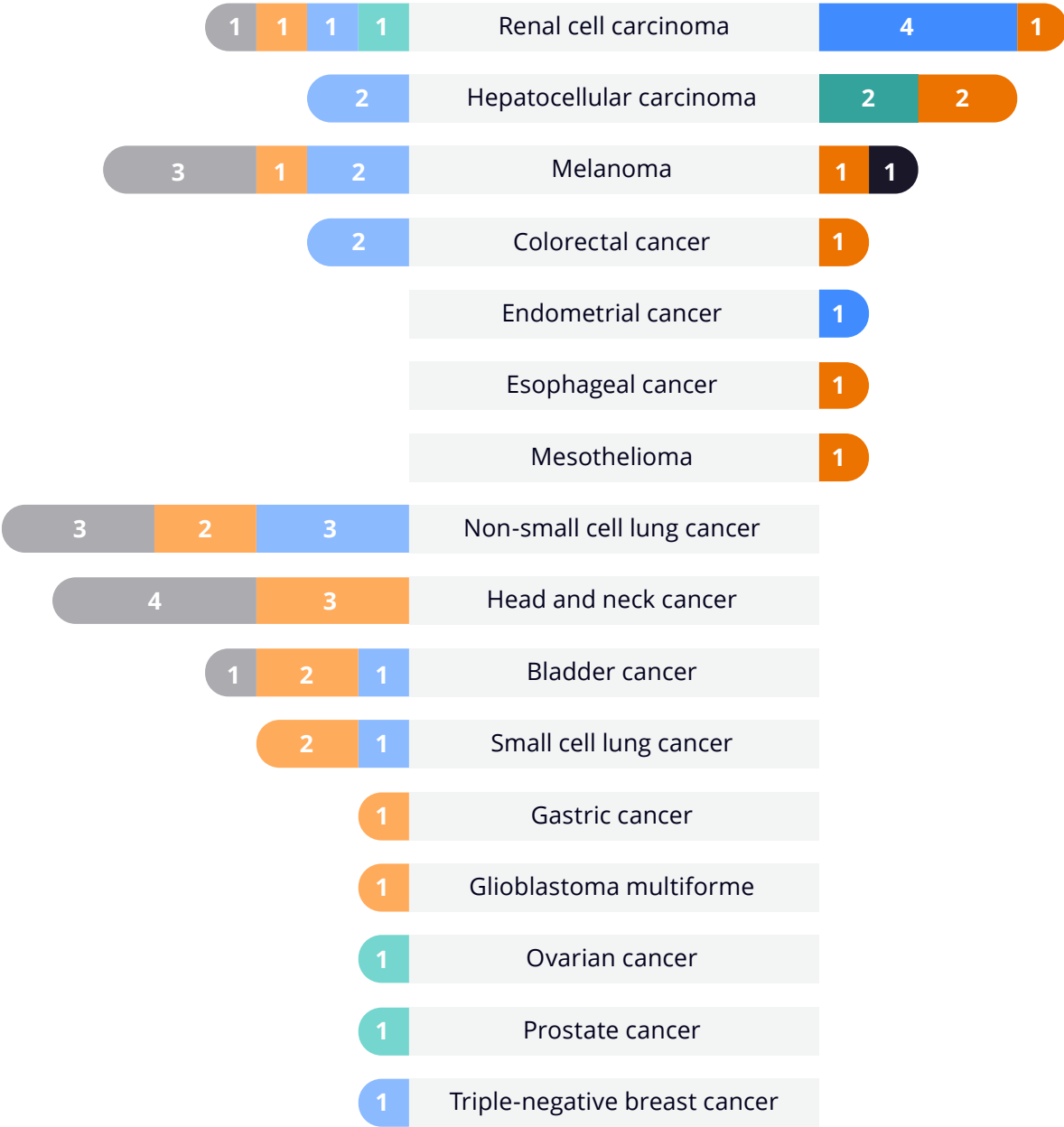
FIGURE 3

Summary of monotherapy data for non-anti-PD-1/anti-PD-L1 therapies not approved as monotherapies in any tumor type

Therapy	Monotherapy overall response rate (ORR)	Sources
Epacadostat	5%	https://www.cancertreatmentreviews.com/article/S0305-7372(22)00130-X/fulltext
Pegilodecakin	0%, 7%, 20%, 27%	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8251721/ https://link.springer.com/article/10.1007/s11912-019-0760-z
Bempegaldesleukin	0%	https://aacrjournals.org/cancerdiscovery/article/9/6/711/42257/A-First-in-Human-Study-and-Biomarker-Analysis-of
Feladilimab/ GSK3359609	6%	https://us.gsk.com/en-us/media/press-releases/gsk-presents-new-data-showing-promising-anti-tumour-activity-with-gsk3359609-an-icos-receptor-agonist-in-combination-with-pembrolizumab-in-head-and-neck-squamous-cell-carcinoma-hnsc/
Canakinumab	No direct monotherapy efficacy data available; phase 3 trials driven by finding of reduced lung cancer incidence in CANTOS study. Did not demonstrate benefit over placebo in combination with docetaxel.	https://www.sciencedirect.com/science/article/pii/S2666364320300011 https://www.annalsofoncology.org/article/S0923-7534(21)04029-1/fulltext
Imjudo	2%, 3%, 6%, 7%, 17%, 19%	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9438922/ https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(15)00092-2/fulltext https://pubmed.ncbi.nlm.nih.gov/20179239/ https://www.sciencedirect.com/science/article/pii/S1470204513703814 https://pubmed.ncbi.nlm.nih.gov/23466307/ https://aacrjournals.org/clincancerres/article/26/1/61/82493/Efficacy-and-Tolerability-of-Tremelimumab-in
Tiragolumab	0%	https://aacrjournals.org/cancerres/article/80/16_Supplement/CT302/645050/Abstract-CT302-Phase-Ia-Ib-dose-escalation-study
Cobimetinib	9%	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6863157/
Ipatasertib	0%	https://www.annalsofoncology.org/article/S0923-7534(20)37813-3/fulltext
Relatlimab	12%	https://www.sciencedirect.com/science/article/abs/pii/S0304419X21001360

FIGURE 4

Pivotal trials testing the addition of other therapies, by class, to anti-PD-1/anti-PD-L1 therapies by tumor type



- Successes: Other non-IO*
- Successes: Kinase inhibitors
- Successes: Anti-CTLA-4
- Successes: Other IO**
- Failures: Other non-IO*
- Failures: Kinase inhibitors
- Failures: Anti-CTLA-4
- Failures: Other IO**

*Other non-immuno-oncology (IO) therapies include Avastin, Talzenna and Lynparza.

**Other (IO) therapies include epacadostat, Imlygic, pegilodecakin, bempegaldesleukin, feladilimab/GSK3359609, canakinumab, tiragolumab, relatlimab.

FIGURE 5

Summary of trial design for pivotal trials adding other therapies to anti-PD-1/anti-PD-L1 therapies in RCC, melanoma, NSCLC and H&N cancer

Tumor type	Experimental arm	Control arm	Category	Result	NCT ID
RCC	Opdivo + Yervoy	Sutent	●	●	NCT02231749
RCC	Keytruda + Inlyta	Sutent	●	●	NCT02853331
RCC	Bavencio + Inlyta	Sutent	●	●	NCT02684006
RCC	Keytruda + Lenvima	Sutent	●	●	NCT02811861
RCC	Opdivo + Cabometyx	Sutent	●	●	NCT03141177
RCC	Tecentriq + Avastin	Sutent	●	●	NCT02420821
RCC	Opdivo + bempedaldesleukin	Sutent/Cabometyx	●	●	NCT03729245
RCC	Opdivo + Yervoy	Placebo	●	●	NCT03138512
RCC	Tecentriq + Cabometyx	Cabometyx	●	●	NCT04338269
Melanoma	Opdivo + Yervoy	Opdivo	●	●	NCT02599402
Melanoma	Opdualag (Opdivo + relatlimab co-formulation)*	Opdivo	●	●	NCT03470922
Melanoma	Keytruda + Imlygic	Keytruda	●	●	NCT02263508
Melanoma	Keytruda + epacadostat	Keytruda	●	●	NCT02752074
Melanoma	Opdivo + bempedaldesleukin	Opdivo	●	●	NCT03635983
NSCLC	Keytruda + pegilodecakin	Keytruda	●	●	NCT03382899
NSCLC	Opdivo + pegilodecakin	Opdivo	●	●	NCT03382912
NSCLC	Keytruda + platinum chemo doublet + canakinumab	Keytruda + platinum chemo doublet	●	●	NCT03631199
H&N	Keytruda + bempedaldesleukin	Keytruda	●	●	NCT04969861
H&N	Keytruda + feladilimab	Keytruda	●	●	NCT04128696
H&N	Keytruda + chemo + feladilimab	Keytruda + chemo	●	●	NCT04428333
H&N	Keytruda + epacadostat	Keytruda (or EXTREME regimen)	●	●	NCT03358472

● Additivity ● Synergy ● Success ● Failure

*Despite lack of monotherapy approval, relatlimab does have evidence of monotherapy efficacy in melanoma (detailed in Figure 3).