

From research to clinical practice-

**Perspective of checkpoint inhibitors in
EOC treatment**

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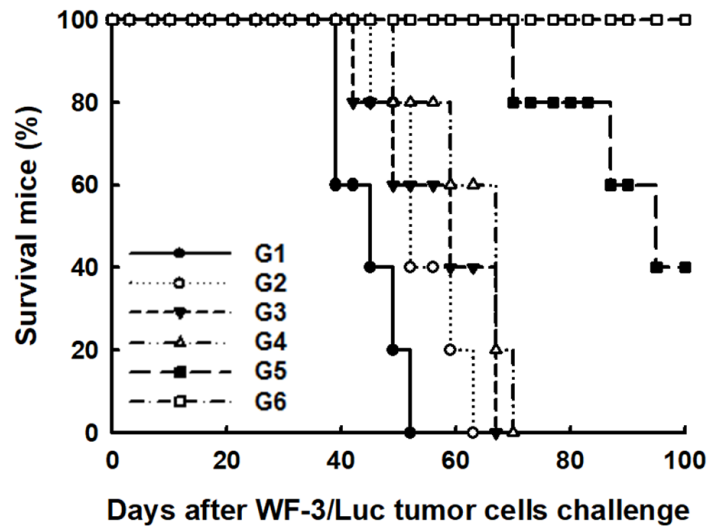
August 22th, 2024

BTLA blockade enhances Cancer therapy by inhibiting IL-6/IL-10-induced CD19^{high} B lymphocytes

Yu-Li Chen¹, Han-Wei Lin², Chung-Liang Chien³, Yen-Ling Lai¹, Wei-Zen Sun^{4,5}, Chi-An Chen^{1*} and Wen-Fang Cheng^{1,2,5*}



Chen et al. Journal for ImmunoTherapy of Cancer (2019) 7:313

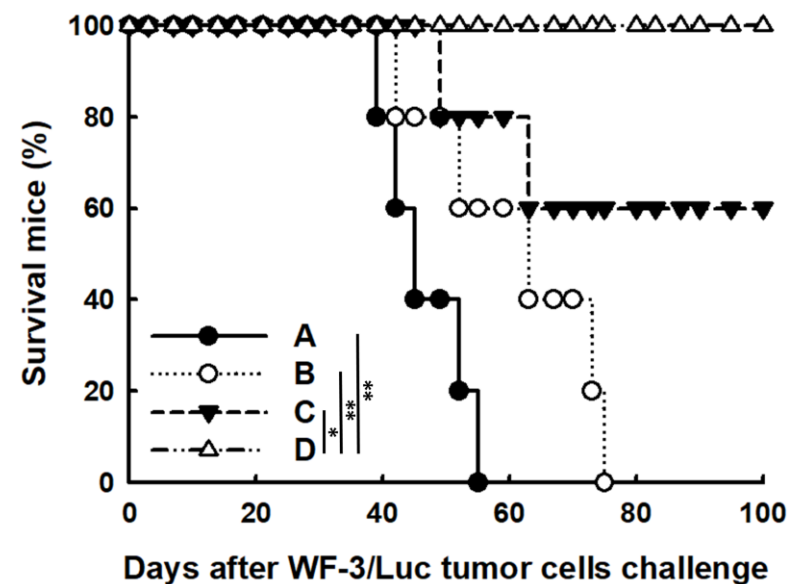


Paclitaxel + Anti-BTLA

Dual inhibition of BTLA and PD-1 can enhance therapeutic efficacy of paclitaxel on intraperitoneally disseminated tumors

Wei-Zen Sun,¹ Han-Wei Lin,¹ Wan-Yu Chen,² Chung-Liang Chien,³ Yen-Ling Lai,^{4,5} Jung Chen,⁴ Yu-Li Chen^{1,4,6}, Wen-Fang Cheng^{2,4,7}

Sun W-Z, et al. J Immunother Cancer 2023;11:e006694.

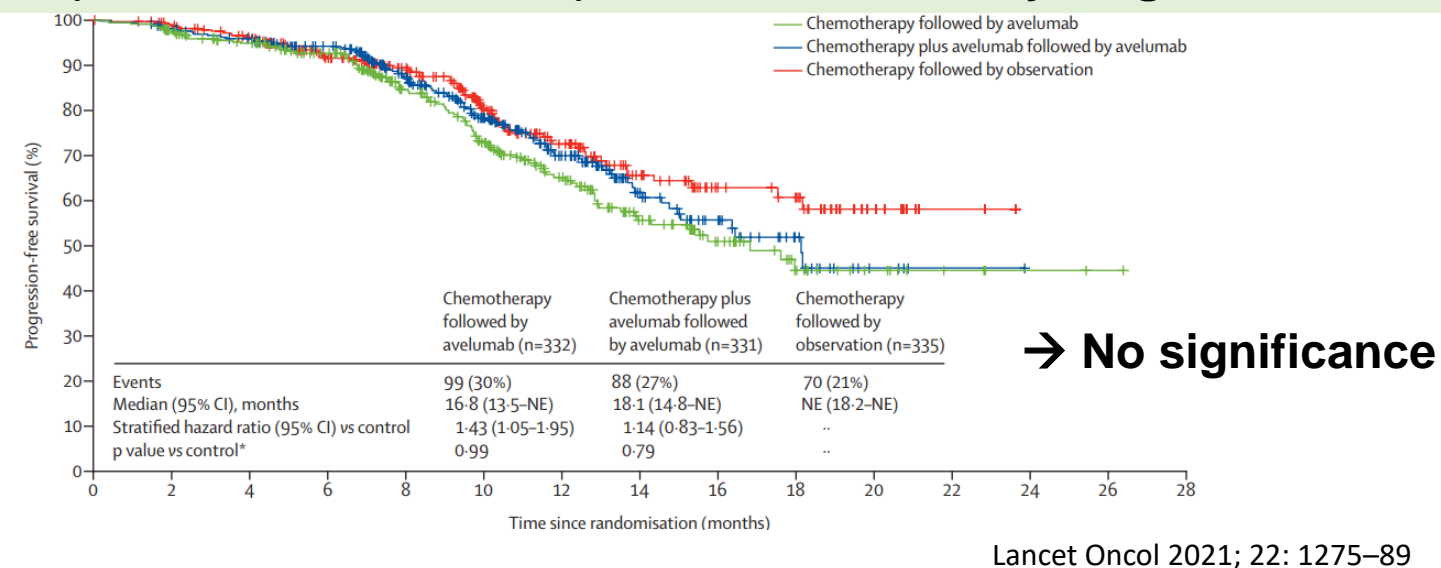


Paclitaxel + Anti-PD-1
+Anti-BTLA

→ Impressive findings. Dual blockade of BTLA and PD-1 may have clinical potential for enhancing the efficacy of PTX in the treatment of EOC.

JAVELIN Ovarian 100 (CTx ± avelumab)

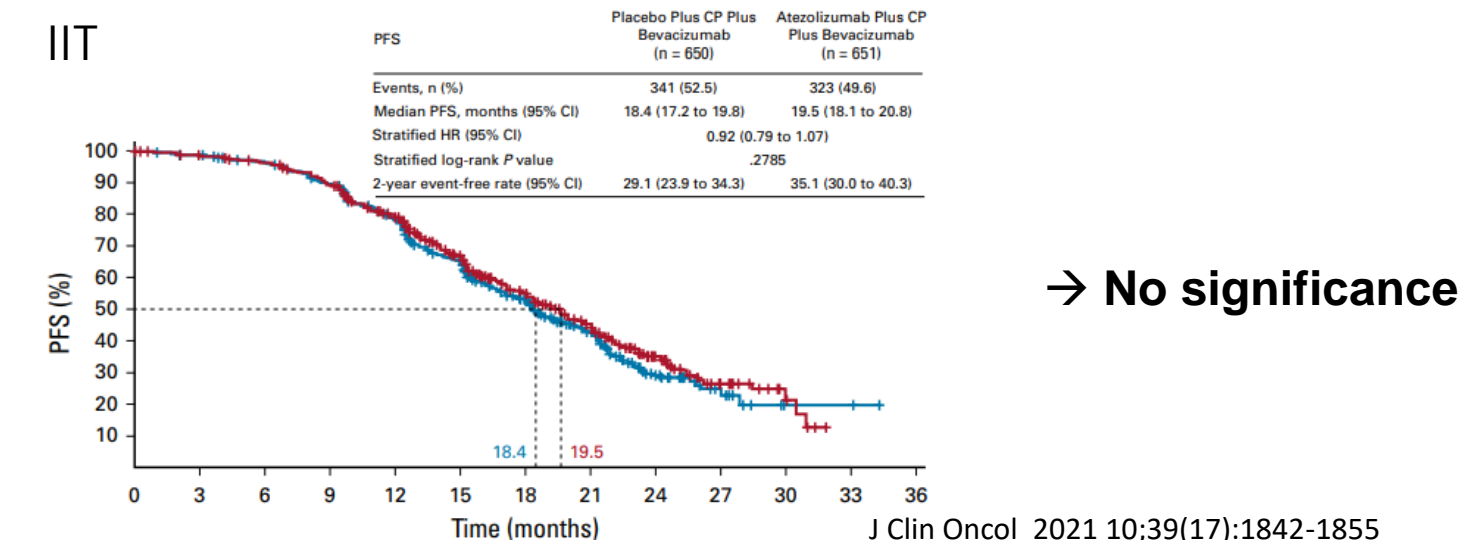
: open-label, randomised, phase 3 trial for newly diagnosed EOC

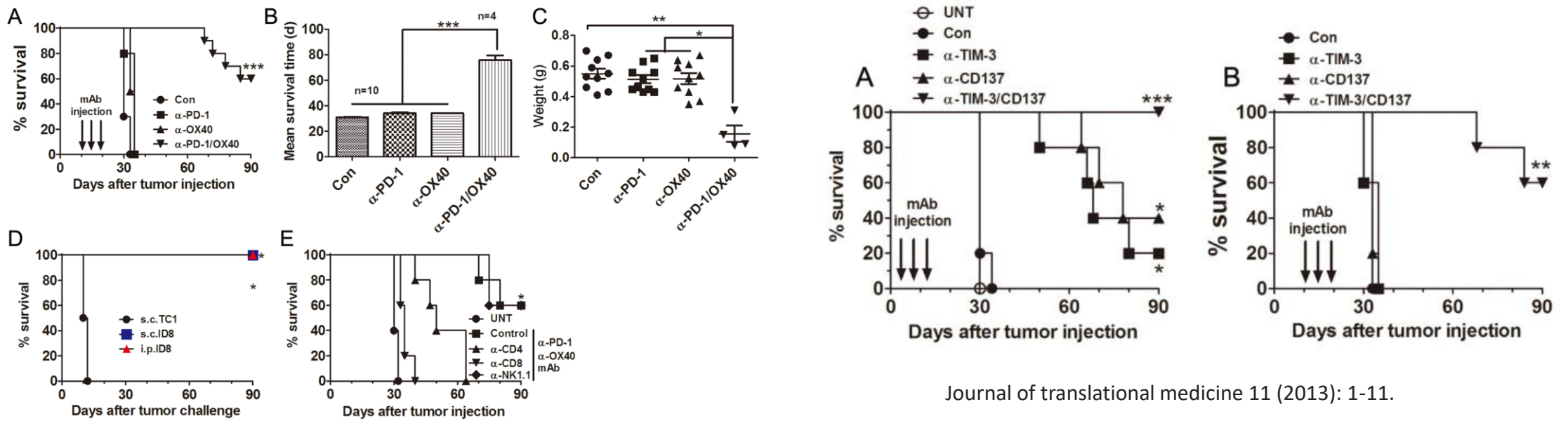


- However, phase 3 clinical studies of chemotherapy combined with anti-PD-L1 treatment in front-line ovarian cancer have so far failed.

IMagyn050 (CTx + bevacizumab ± atezolizumab)

: randomised, phase 3 trial for newly diagnosed advanced EOC





Journal of translational medicine 11 (2013): 1-11.

PLoS one 9.2 (2014): e89350

Study Name	Phase	Target Population	Administered Drugs	Results
Keynote-028	Ib	PD-L1+ROC	Pembrolizumab	ORR 11.5%
Keynote-100	II	ROC	Pembrolizumab	ORR 8.5%, DCR 22.1%
UMIN00005714	II	PR-ROC	Nivolumab	ORR 15%
NRG-GY003	II	PS & PR-ROC	vs. nivolumab+ipilimumab → nivolumab maintenance	ORR 31.4% (N+I) vs. 12.2% (N)
JAVELIN Ovarian 100	III	1st line EOC	CTx ± avelumab	PFS no significance
IMagyn050	III	1st line EOC	CTx + bevacizumab ± atezolizumab	PFS no significance

- Promising results of immune checkpoint inhibitors in several preclinical studies, but disappointing results in clinical trials.

Questions

Q1> Is there any promising reason to expect that anti-BTLA-4 combined with chemotherapy may yield different results from recent clinical trials?

Q2> What do you think is the reason for this discrepancy between preclinical results and clinical trial outcomes in epithelial ovarian cancer?