Table 3: Reported clinical trials of NPs & Extracellular vesicles against NSCLC on Pubmed

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**Treatments Phase No. of Dose\* Outcomes References**

**patients**

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**Nanoparticles**

130nm Nab-paclitaxel I/II 40 100, 125, 150, 175 mg/m2 Well tolerated, 30% ORR, Median OS [1]

on days 1, 8, and 15 of a of 11 months, 41% 1-year survival

28-day cycle every 8 weeks

BIND-014 I 28 Q1W-15mg/ m2 – 45 mg/m2 Q1W MTD- 40 mg/ m2 [2] 30 Q2W-3.5mg/m2 – 75 mg/ m2 Q3W MTD- 60 mg/ m2

Genexol-PM and cisplatin II 69 230 mg/m2 on day 1 of 3 weeks ORR was 37.7%, Median Ttp & [3]

cycle; escalates to 300 mg/m2 insurvival period were 5.8 and 21.7

second cycle months

Genexol-PM and gemcitabine II 43 230 mg/m2 on day1 of 3 weeks 46.5% overall response rate, [4]

cycle Median PFS was 4 months,

Median OS was 14.8 months

Nab-paclitaxel,carboplatin & II 50 300 mg/m2 on day1 of each Well tolerated, 31% response rate, [5]

Bevacizumab 21 days cycle Stable disease rate of 54%,

Median PFS was 9.8 months,

Median OS was 16.8 months

Nab-paclitaxel, III 243 100 mg/m2 on days 1, 8 & 15 EFS was 14.6 months, PFS was 6.2 [6]

carboplatin & every 3 weeks with or without months

nintedanib nintedanib at 150 mg twice daily

Nab-paclitaxel, carboplatin I 17 Level1-30 mg/m2 or Overall response rate of 76.5%, median [7]

& thoracic radiotherapy Level2-40 mg/m2 on PFS was 13.4 months, Tolerated

days 1,8,15,22,29&36 for

6 weeks

Nab-paclitaxel monotherapy I/II 15 100–150 mg/m2 on days 1 & 15 ORR was 22%, Median PFS & OS were [8]

(biweekly) in every 28 days 3.6 &11.2 months respectively

Nab-paclitaxel monotherapy II 30 80 mg/m2 on days 1, 8, and 15 ORR was 23%, Median PFS & OS were [9]

(weekly) (21-d cycle) 5.7 & 12.6 months

**Extracellular Vesicles**

TMPs-MTX - 86 50 ml saline containing 5 units TMPs-MTX combined with pemetrexed- [10]

of TMPs-MTX/perfusion, once cisplatin chemotherapy is safe and effective

every 48 hrs-6 perfusions against MPE in patients with advanced non-

squamous NSCLC

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\* Only the dose of nano drugs carriers has been mentioned

Abbreviations:

BIND-014-Tumor prostate-specific membrane antigen (PSMA)–targeted nanoparticle, containing docetaxel; EFS- Median event free survival; Genexol—PM- Cremorphor EL (CrEL)-free polymeric micelle formulation of paclitaxel; MPE-Malignant pleural effusion; MTD-Maximum tolerated dose; Nab- Nanoparticle albumin-bound paclitaxel; NPs-Nanoparticles; NSCLC-Non small cell lung cancer; ORR-Overall response rate; OS-Overall survival; PFS-Progression-free survival; Q1W-Once in week; Q3W-Once in every 3 weeks; TMPs-MTX-Tumor cell-derived microparticles packaging methotrexate; TtP- Time to progression

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