## Supplementary Table 1.

| Patient | Age/<br>Sex |                        | AJCC<br>Stage | Prior<br>treatment         | Pleural Infusion<br>Treatment (IP) | Changes of PE                   |                     |                        | Evaluation | Survival |
|---------|-------------|------------------------|---------------|----------------------------|------------------------------------|---------------------------------|---------------------|------------------------|------------|----------|
|         |             |                        |               |                            |                                    | UE                              | Color               | Turbidity              | Evaluation | (months) |
| 1       | 66/F        | Lung<br>adenocarcinoma | IV            | DP 4 cycles<br>PP 3 cycles | 5U cisplatin-MP<br>×4 times        | B: left 6.4cm<br>A: left 2.9cm  | B: Red<br>A: Yellow | B: Turbid<br>A: Bright | PR         | 10       |
| 2       | 58/M        | Lung<br>adenocarcinoma | IV            | IP cisplatin<br>1 time     | 5U cisplatin-MP<br>×4 times        | B: left 9.7cm<br>A: left 3.7cm  | B: Red<br>A: Yellow | B: Turbid<br>A: Bright | PR         | 6        |
| 3       | 56/M        | Lung<br>adenocarcinoma | IV            | PP 3 cycles<br>PC 2 cycles | 5U cisplatin-MP<br>×4 times        | B: left 5.5cm<br>A: left —      | B: Red<br>A: Yellow | B: Turbid<br>A: Bright | CR         | 3        |
| 4       | 64/F        | Lung<br>adenocarcinoma | IV            | PP 3 cycles                | cisplatin 2 time<br>(60mg each)    | B: left 8.8cm<br>A: left 7.5cm  | B: Red<br>A: Red    | B:Turbid<br>A:Turbid   | NC         | 5        |
| 5       | 75/M        | Lung<br>adenocarcinoma | IV            | PP 1 cycles                | cisplatin 2 times<br>(60mg each)   | B: left 8.9cm<br>A: left 11.8cm | B: Yellow<br>A: Red | B:Turbid<br>A:Turbid   | NC         | 3        |
| 6       | 58/F        | Lung<br>adenocarcinoma | IV            | PP 2 cycles                | cisplatin 2 times<br>(60mg each)   | B: left 9.3cm<br>A: left 7.2cm  | B: Red<br>A: Red    | B:Turbid<br>A:Turbid   | SD         | 2        |

F: female; M: male; DP: docetaxel+cisplatin; PP: pemetrexed+cisplatin; PC: taxol+carboplatin; IP: intrapleural perfusion;

## **Supplementary information, Table S1. Outcomes of clinical treatment** (Related to **Figure 1**).

 $<sup>1 \</sup>text{U (1Unit)} = 1 \times 10^7 \text{ cisplatin-MP} = 10 \mu \text{g}; \text{ PE: Pleural effusion; UE: ultrasonic examination; B: before; A: after; left: left pleural cavity; } \\$ 

PR: partial response; CR: complete remission; NC: no change; SD: stable disease.