

# 日本語要約

- ◎ 遠隔転移、腹膜播種を有する手術不能胃癌、胃癌術後再発を対象
- ◎ 化学療法、温熱療法、高気圧酸素治療による集学的治療の成果
- ◎ 全体の間接生存期間は18ヶ月、2年生存率は32%
- ◎ 遠隔転移、腹膜播種のどちらか一方の症例は、両者を有する症例より有意に予後が良かった
- ◎ 集学的治療による良好な治療成績が証明された

# Palliative chemo-hyperthermia for primary or post-operative gastric carcinoma with organ metastasis or peritoneal dissemination

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# Backgrounds

- Generally, in the case of primary or post-operative gastric carcinoma with organ metastasis or peritoneal dissemination, palliative chemotherapy was performed.
- We performed chemotherapy plus regional hyperthermia (HT) and hyperbaric oxygen therapy (HBO) for these conditions of 45 patients.

# Materials

- Between 2007-2011
- The patients were 28 males and 16 females, mean age were 62.2, performance status (PS) was 1: 2=34: 10.
- 21 patients were primary disease (stage IV) and 23 were post-operative recurrence.
- Pathological diagnosis: differentiated type: anaplastic type=17: 26.

# Chemotherapy

- First line chemotherapy regimen

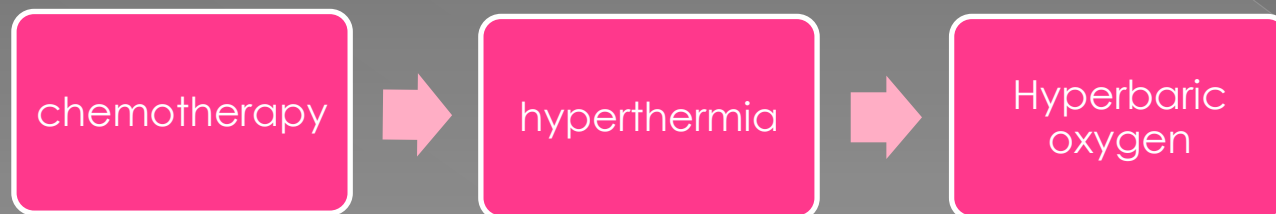
Regimen	No. of cases
CDDP/S-1	28
S-1	5
5-FU/LV	4
PAC/CDDP	3
DOC	2
PAC	1

# Hyperthermia

- All patients were received.
- Session:  $25.7 \pm 17.2$
- 8 MHz radiofrequency-capacitive regional hyperthermia (Thermotron RF-8)
- Heating location: lung, liver, pelvis, peritoneum (focus to main tumor )
- time: 50min
- Schedule: just after chemotherapy or during chemotherapy

# Hyperbaric oxygen (HBO)

- All patients were received.
- Session:  $19.6 \pm 15.2$
- Chamber (Sechrist Industries Inc., model 2800 J, Anaheim, California) pressured with 100% oxygen to 2.0 atmospheres absolute
- Time: 90min
- Schedule: just after chemo-hyperthermia



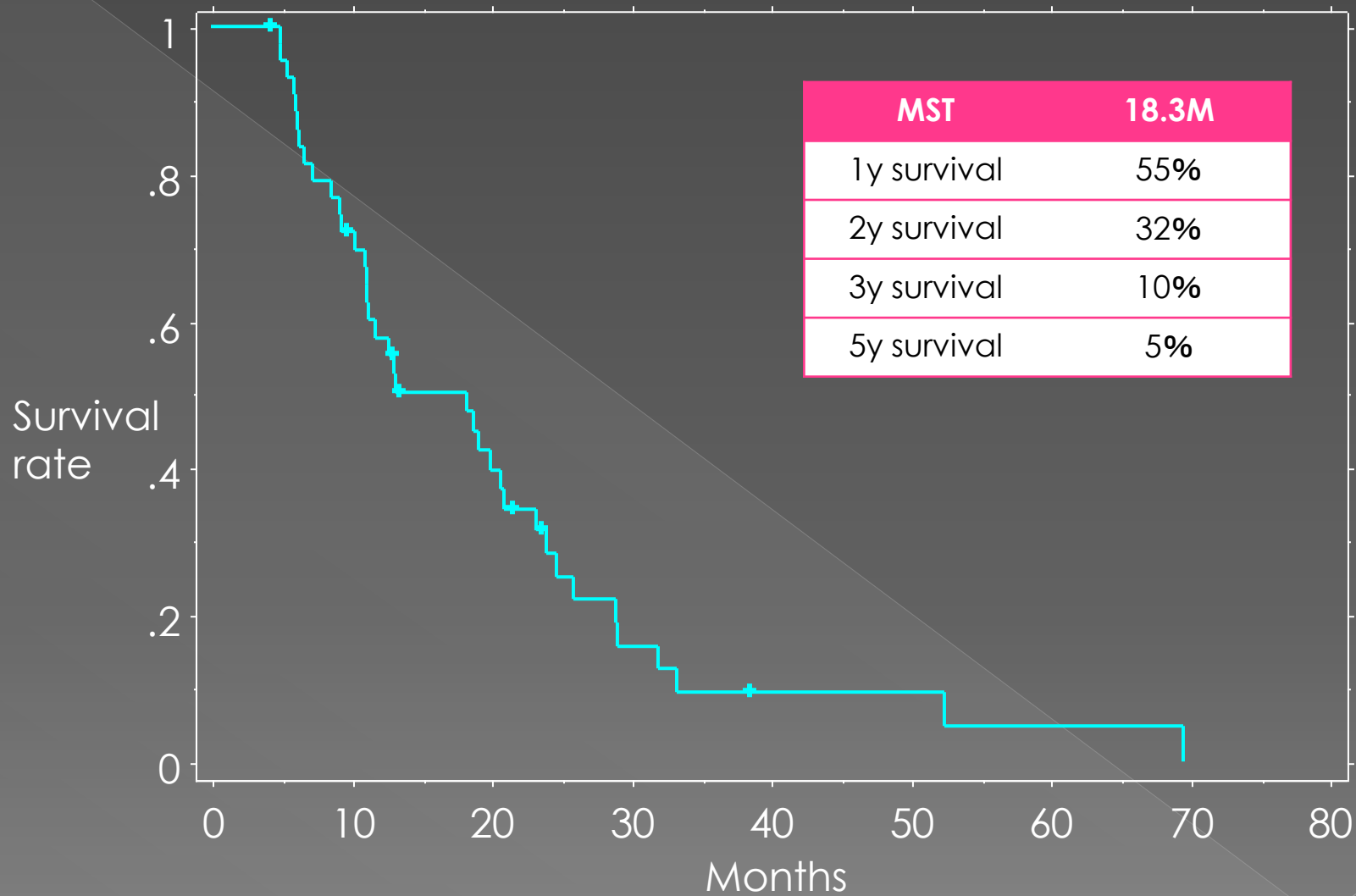


Fig. 1: Overall survival curve of all cases



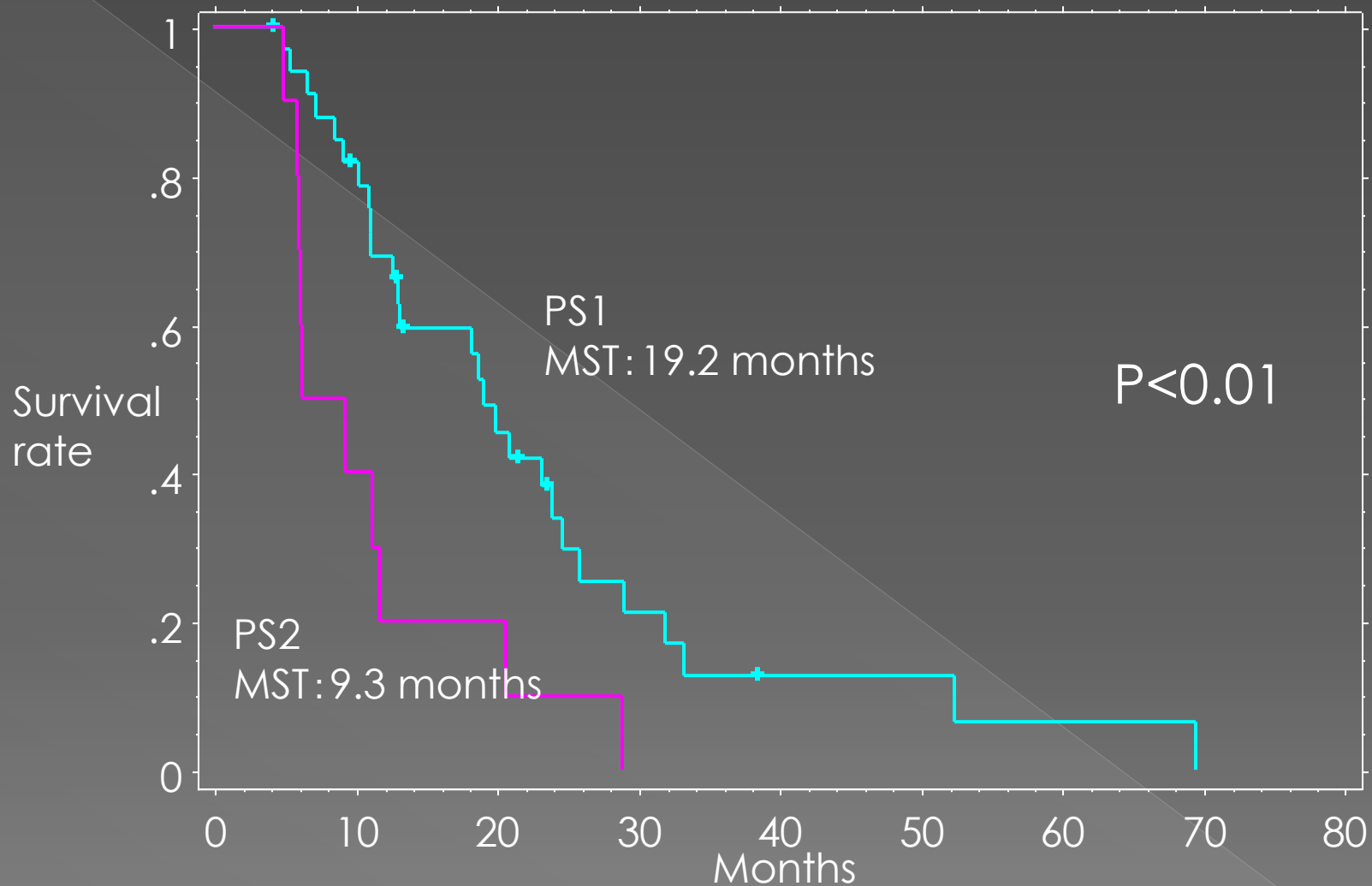


Fig. 2: Overall survival curve by PS

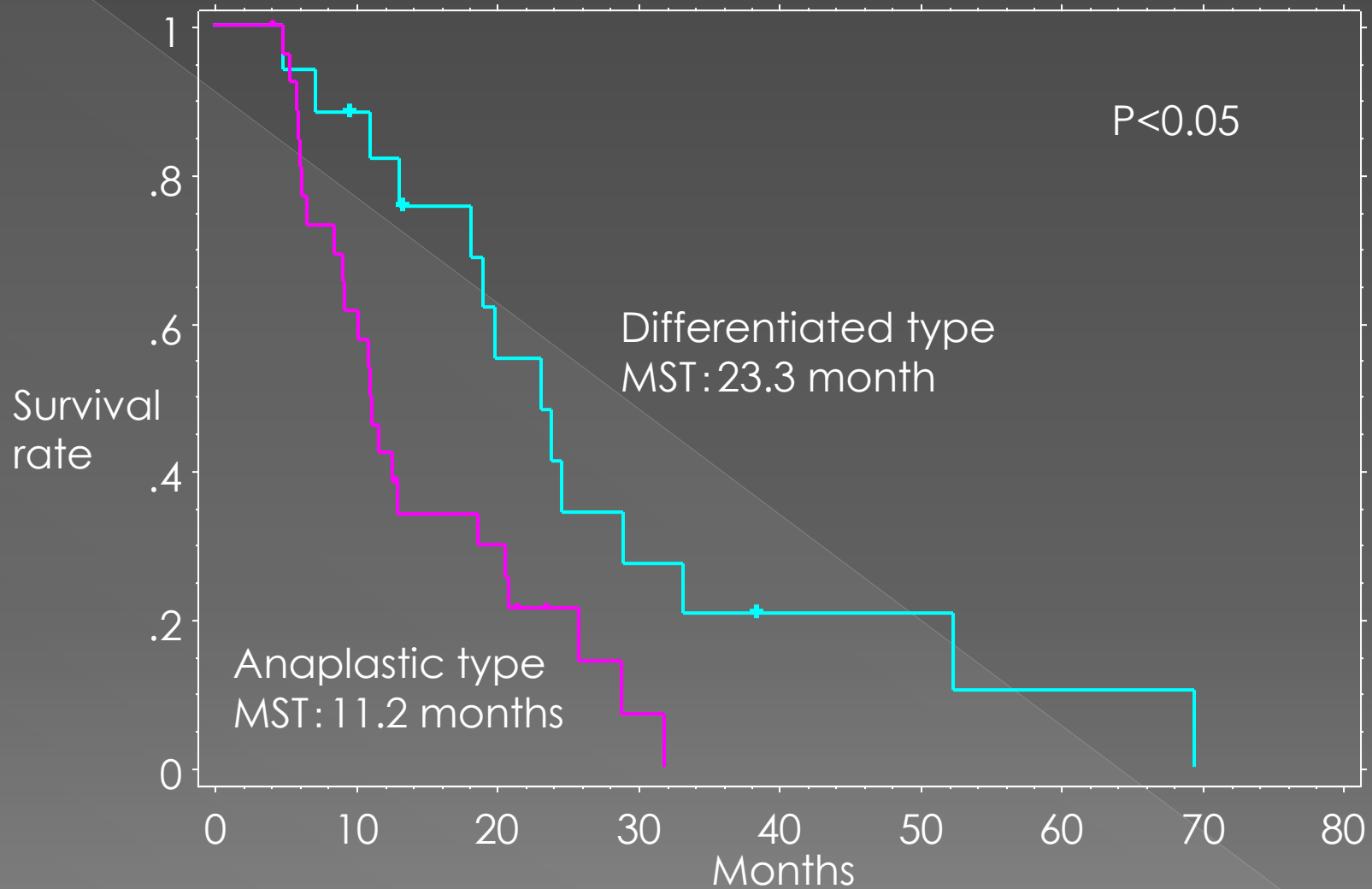


Fig. 3: Overall survival curve by histological type

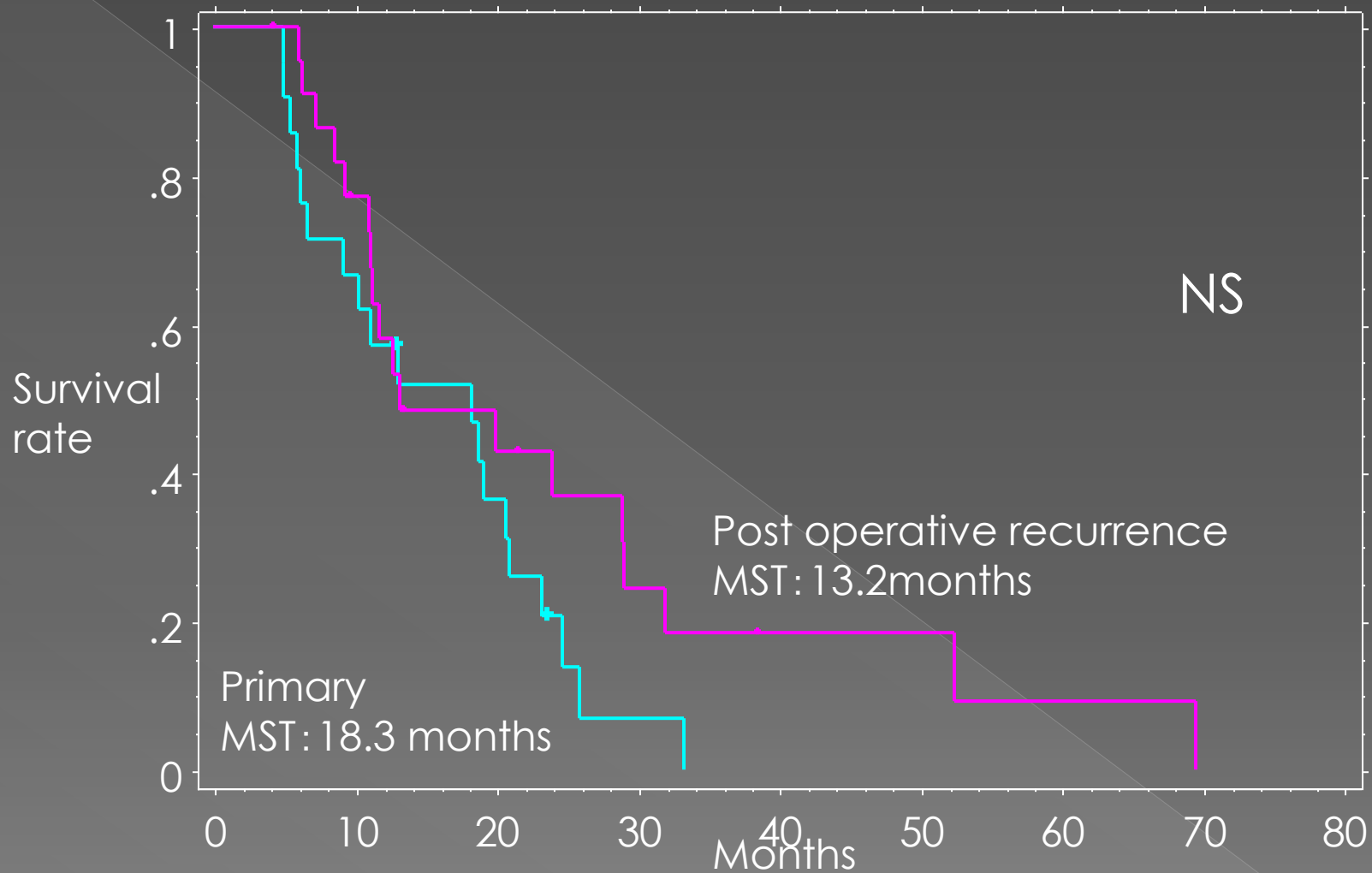


Fig. 4: Overall survival curve by primary or post operative recurrence

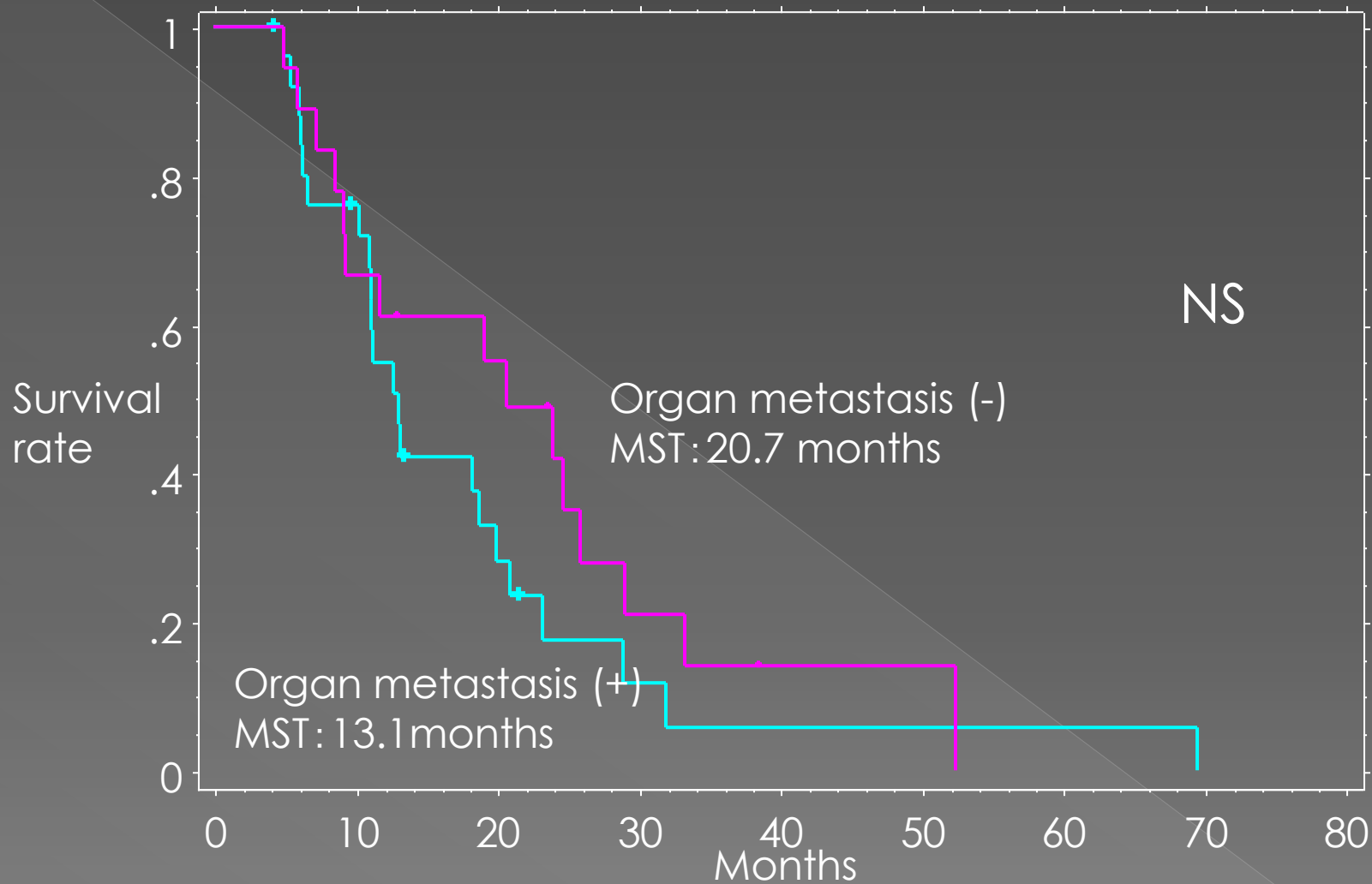


Fig. 5: Overall survival curve by organ metastasis

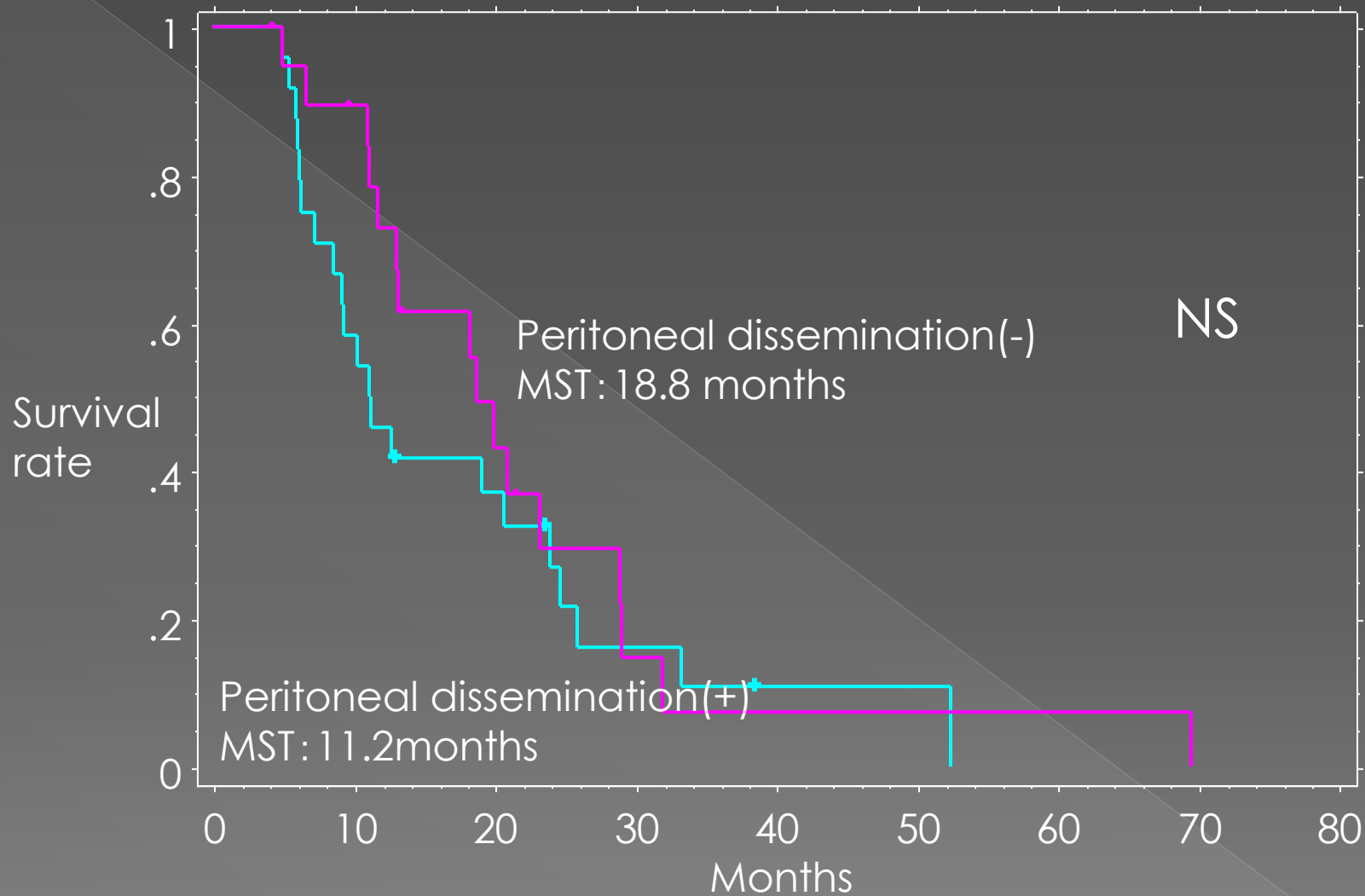


Fig. 6: Overall survival curve by peritoneal dissemination

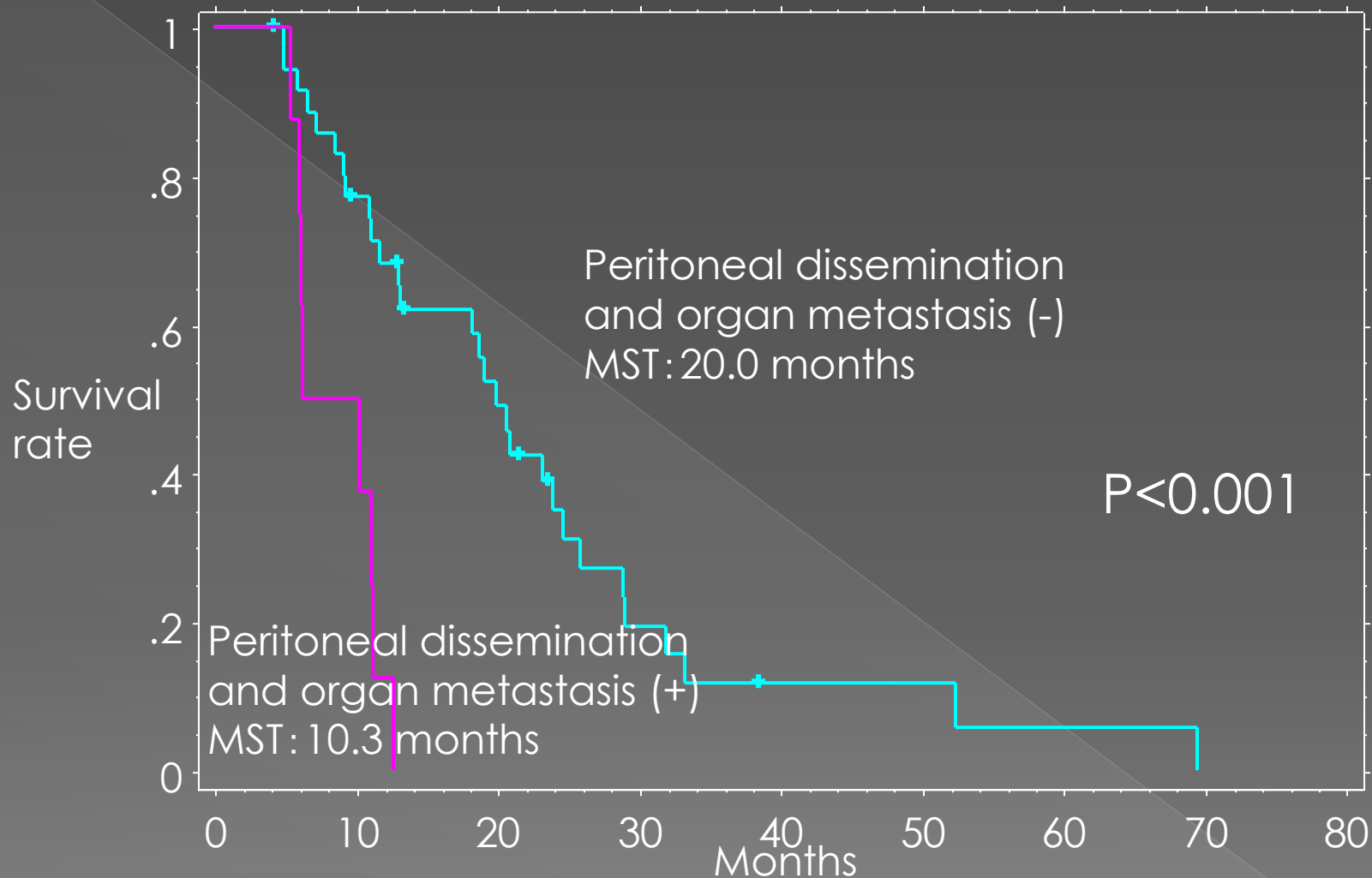


Fig. 7: Overall survival curve organ metastasis and peritoneal dissemination

# Results

- Median survival time was 18.3 months and 1, 2 and 3 year survival rate was 55, 32 and 10%, respectively (Fig. 1).
- Fig. 2-6 show the results of univariate analysis for overall survival. Significant difference was recognized in PS (PS 1 > PS 2) and histological type (differentiated > anaplastic) as shown in Fig. 2 and 3.
- Fig. 7 showed that overall survival of the either organ metastasis or peritoneal dissemination group was significantly better than the both group ( $p < 0.001$ ).

# Discussion

- S-1 plus CDDP is standard regime for the good PS patients with primarily unresectable and recurrent gastric cancer and high response rate (14%) and long median survival time (13 months) were shown by S-1 plus CDDP in Japan.
- We performed the chemotherapy combined with HT and HBO for primarily unresectable and recurrent gastric cancer, because both HT and HBO might be potentially valuable due to their actions as chemo-sensitizers,
- In this study, better median survival time (18 months) was shown. Multidisciplinary therapy including chemotherapy, HT and HBO may be useful for primarily unresectable and recurrent gastric cancer.



# Conclusion

- In the palliative chemotherapy for primary or post-operative gastric carcinoma with organ metastasis or peritoneal dissemination, combination with HT and HBO could contribute to a better clinical outcome.