rate of CA19-9 after two cycles of GnP were 747 U/ml (AUC: 0.66), 5 (AUC: 0.70), and 0.69 (AUC: 0.73).

**Overall survival rate based on all risk factors.** In multivariate analyses, baseline CA19-9 ≥747 U/ml [hazard ratio (HR)=1.9], baseline CONUT score ≥5 (HR=3.7), and changing rate of CA19-9 after two treatment cycles ≥0.69 (HR=3.7) were independent risk factors for a poor prognosis (Table VII). When examining outcomes according to these prognostic factors, the 1- and 3-year OS rates of patients with a risk score of 0 (n=37), 1 (n=45), 2 (n=27), and 3 (n=4) were 94% and 39% (MST: 2.0 years), 56% and 11% (MST: 1.2 years), 0% and 0% (MST: 0.55 years), 0% and 0% (MST: 0.17 years), respectively (p<0.001) (Figure 1). The HRs of the risk score groups 1, 2, and 3 were 2.8, 15.9, and 201.4 times that of the pre-low-risk and effective groups, respectively (p<0.05).

**Overall survival rate based on pre-chemotherapy-measurable risk factors.** When examining outcomes according to the pre-chemotherapeutic obtainable parameters (baseline CA19-9 ≥747 U/ml and baseline CONUT score ≥5), the 1- and 3-year OS rates of patients with pre-chemotherapy-measurable risk scores (pre-risk scores) of 0 (n=63) were 79% and 27% (MST: 1.7 years); for those with pre-risk scores of 1-2, these were 20% and 4% (MST: 0.65 years), respectively (p<0.001) (Figure 2). The HR of the pre-risk score group 1-2 was 3.3 times that of the pre-risk score group 0 (p<0.001). We defined patients with pre-risk score 0 as pre-chemotherapy low-risk (pre-low-risk) group, and patients with pre-risk score 1-2 as pre-chemotherapy high-risk (pre-high-risk) group.

**Overall survival rate based on pre-chemotherapeutic risk and effectiveness of GnP.** We grouped the patients according to the effects of GnP. We defined patients with a changing rate of CA19-9 <0.69, after two courses of GnP, as the effective group, and patients with a changing rate of CA19-9 ≥0.69, after two courses of GnP, as the ineffective group.

We analyzed the prognosis in these two categories (pre-risk and effectiveness). The 1- and 3-year OS rates of the pre-low-risk and effective group, pre-low-risk and ineffective group, pre-high-risk and effective group, and pre-high-risk and ineffective group were 94% and 39% (MST: 2.0 years), 58% and 12% (MST: 1.2 years), 48% and 10% (MST: 1.2 years), and 0% and 0% (MST: 0.52 years) (p<0.001), respectively (Figure 3). The HRs of the pre-low-risk and ineffective group, pre-high-risk and effective group, and pre-high-risk and ineffective group were 2.8, 2.9, and 20.3 times that of the pre-low-risk and effective groups, respectively (p<0.05) (Table VIII). There were no differences in the 1- and 3-year OS rates between patients in the pre-low-risk and ineffective and pre-high-risk and effective groups (p=0.89).

**Time to most decrease and re-increase in CA19-9 levels.** In patients in the pre-high-risk and ineffective group, pre-low-risk and ineffective group, pre-high-risk and effective group, and pre-low-risk and effective group, the median time to most decrease and re-increase in CA19-9 level was 61, 73, 86, and 117 days (p=0.012), and 41, 87, 150, and 233 days, respectively (p<0.001) (Table IX).