Figure S1: Patient eligibility and study design

Stage III NSCLC

- Resectable
  - Radical RT possible
    - Concurrent chemotherapy possible
      - Surgical therapy
    - Concurrent chemotherapy impossible
      - CRT (platinum-based)
  - Radical RT impossible
    - First-line therapy Stage IV

This study

Surgical
therapy

CRT
(platinum-based)

Surgical
therapy

Design
Multicenter retrospective observational study

Number of centers
12

Registration
Consecutively registered patients diagnosed with unresectable Stage III NSCLC between January 1, 2013 and December 31, 2015

Number of patients registered
318 patients

Eligibility criteria for the m-sub population†

- At least two cycles of platinum-based chemotherapy concurrent with definitive radiotherapy
- Performance status 0 or 1
- Complete response, partial response, or stable disease on first-line CRT and no progression at completion of CRT
- Total radiation dose of 54–66 Gy

Exclusion criteria for the m-sub population†

- Carboplatin monotherapy
- Grade ≥3 treatment-related adverse event (other than pneumonitis) during first-line therapy, unless the patient had recovered prior to enrolment
- Grade ≥2 pneumonitis during the first-line therapy or pneumonitis of unknown grade treated with a steroid

Abbreviations: NSCLC, non-small cell lung cancer; RT, radiotherapy; CRT, chemoradiotherapy; m-sub, subgroup of patients deemed eligible for maintenance therapy after CRT.

†Based on some of the main eligibility criteria from the PACIFIC study [Antonia SJ, Villegas A, Daniel D, et al. N Engl J Med. 2017;377:1919-1929].
Patients registered
N=318

FAS
N=306

Excluded
N=12
- Platinum agent not used in primary therapy (n=10)
- Not included in the patients list for registration (n=1)
- Treated with active component in a clinical trial (n=1)

m-sub
N=214 (69.9%)

Non-m-sub
N=92
Reasons for exclusion†
- Did not receive ≥2 cycles of platinum-based CRT as primary therapy (n=35)
- Treated with CBDCA as a single-agent regimen (n=23)
- Performance status ≥2 (n=14)
- Total RT dose not in target range of 54–66 Gy (n=17)
- PD during primary therapy (n=17)
- Did not recover from a grade ≥3 AE other than pneumonitis during primary therapy, excluding consolidate therapy (n=13)
- Grade ≥2 pneumonitis during primary therapy, excluding consolidate therapy (n=6)
- Treatment with corticosteroids for pneumonitis of unknown grade (n=4)

Abbreviations: FAS, full analysis set; m-sub, subgroup of patients deemed eligible for maintenance therapy after CRT; non-m-sub, patients from the FAS excluded from the m-sub; CRT, chemoradiotherapy; CBDCA, carboplatin; RT, radiotherapy; PD, progressive disease; AE, adverse event.
†Multiple reasons may apply.
**FIGURE S3** Kaplan–Meier plots of overall survival (A) and progression-free survival (B) from the start of chemoradiotherapy in the full analysis set.

### A

**Median OS**

- **33.1 months**
- (27.0–42.5)

### Table A: OS at various time points

| N at risk | OS at 12 mo† (95% CI) | OS at 24 mo† (95% CI) | OS at 36 mo† (95% CI) | OS at 48 mo† (95% CI) | OS at 60 mo† (95% CI) |
|-----------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 306       | 82.9% (78.1%–86.8%)    | 60.6% (54.6%–66.1%)    | 47.4% (41.3%–53.3%)    | 40.4% (34.2%–46.5%)    | 38.3% (31.8%–44.8%) |

### B

**Median PFS**

- **10.3 months**
- (9.1–11.9)

### Table B: PFS at various time points

| N at risk | PFS at 12 mo† (95% CI) | PFS at 24 mo† (95% CI) | PFS at 36 mo† (95% CI) | PFS at 48 mo† (95% CI) | PFS at 60 mo† (95% CI) |
|-----------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 306       | 44.4% (38.7%–50.0%)    | 29.1% (24.0%–34.4%)    | 22.7% (18.1%–27.8%)    | 19.8% (15.3%–24.7%)    | 18.8% (14.2%–23.9%) |

**Abbreviations:** OS, overall survival; CRT, chemoradiotherapy; mo, month; CI, confidence interval; PFS, progression-free survival

†Kaplan-Meier estimated values.
FIGURE S4 Kaplan–Meier plots of overall survival (A) and progression-free survival (B) from the start of chemoradiotherapy according to the chemotherapy regimen in the full analysis set.

A

![Kaplan-Meier plots](image)

| Regimen          | N at risk | Median OS† (95% CI) | OS at 12 months† (95% CI) | OS at 24 months† (95% CI) | OS at 36 months† (95% CI) |
|------------------|-----------|---------------------|--------------------------|--------------------------|--------------------------|
| CBDCA+PAC        | 62        | 27.6 months (19.9–42.5) | 79.5% (66.7%–87.8%)      | 56.6% (42.4%–68.6%)       | 41.8% (28.2%–54.8%)      |
| CDDP+VNR         | 92        | 41.5 months (27.0–NR)  | 85.5% (76.4%–91.3%)      | 66.9% (56.0%–75.7%)       | 51.4% (40.4%–61.4%)      |
| CDDP+DTX         | 71        | NR                  | 92.3% (82.4%–96.7%)      | 69.3% (56.1%–79.2%)       | 59.9% (46.1%–71.2%)      |
| CBDCA            | 23        | 21.2 months (9.4–30.1) | 69.3% (46.1%–84.0%)      | 35.6% (16.4%–55.3%)       | 25.4% (9.5%–45.1%)       |
| CDDP+S-1         | 44        | 25.2 months (15.6–36.3) | 76.7% (60.9%–86.7%)      | 54.1% (37.8%–67.9%)       | 37.0% (22.1%–52.0%)      |
| Other            | 14        | NR                  | 78.6% (47.2%–92.5%)      | 56.3% (27.2%–77.6%)       | 56.3% (27.2%–77.6%)      |

Abbreviations: OS, overall survival; CBDCA, carboplatin; PAC, paclitaxel; CDDP, cisplatin; VNR, vinorelbine; DTX, docetaxel; S-1, tegafur/gimeracil/oteracil; CRT, chemoradiotherapy; CI, confidence interval; NR, not reached.

†Kaplan-Meier estimated values.
FIGURE S4

Abbreviations: PFS, progression-free survival; CBDCA, carboplatin; PAC, paclitaxel; CDDP, cisplatin; VNR, vinorelbine; DTX, docetaxel; S-1, tegafur/gimeracil/oteracil; CRT, chemoradiotherapy; CI, confidence interval; NR, not reached.

†Kaplan-Meier estimated values.
FIGURE S5 Kaplan–Meier plots of overall survival (A) and progression-free survival (B) according to consolidation therapy measured from the start of chemoradiotherapy in the full analysis set

A

Abbreviations: OS, overall survival; CRT, chemoradiotherapy; CI, confidence interval; HR, hazard ratio.

†Kaplan-Meier estimated values.
**FIGURE S5**

Abbreviations: PFS, progression-free survival; CRT, chemoradiotherapy; CI, confidence interval; HR, hazard ratio.

| Consolidation therapy | n   | Median PFS† (95% CI) | PFS at 24 months† (95% CI) | PFS at 36 months† (95% CI) | HR (95% CI) |
|------------------------|-----|----------------------|-----------------------------|-----------------------------|-------------|
| Yes                    | 148 | 12.1 months (10.2–13.7) | 30.8% (23.5%–38.4%) | 25.1% (18.3%–32.4%) | 0.778 (0.602–1.006) |
| No                     | 158 | 9.0 months (7.3–10.9) | 27.6% (20.6%–35.0%) | 20.5% (14.2%–27.6%) |            |

†Kaplan-Meier estimated values.
FIGURE S6 Timing of onset and cumulative incidence rate of pneumonitis, esophagitis, radiation dermatitis, and pericarditis in the full analysis set. The grade of pneumonitis is also indicated. Timing of onset was measured from the start of CRT.

Abbreviations: CRT, chemoradiotherapy
FIGURE S7 Incidence rate of pneumonitis according to the type of chemotherapy received in the full analysis set (A) and m-sub (B)

A

B

Abbreviations: m-sub, subgroup of patients deemed eligible for maintenance therapy after CRT; CBDCA, carboplatin; PAC, paclitaxel; CDDP, cisplatin; VNR, vinorelbine; DTX, docetaxel; S-1, tegafur/gimeracil/oteracil; CRT, chemoradiotherapy.