**Supplementary methods**

**Other systemic therapies used as exclusion criteria**

**Chemotherapy:** Carboplatin, Cisplatin, Docetaxel, Etoposide / Etoposide phosphate, Gemcitabine hydrochloride, Irinotecan hydrochloride, Paclitaxel, Pemetrexed, Vinblastine sulfate, Vinorelbine tartrate; **Targeted therapy:** Alectinib, Bevacizumab, Carbozantinib, Ceritinib, Cetuximab, Crizotinib, Dabrafenib, Gefitinib, Necitumumab, Osimertinib, Ramucirumab, Trastuzumab, Trametinib, Vemurafenib; **Immunotherapy**: Nivolumab, Pembrolizumab

**Chemotherapy Regimens for Adjuvant and Neoadjuvant Therapy**

Cisplatin + vinorelbine; Cisplatin + gemcitabine; Cisplatin + docetaxel; Cisplatin + pemetrexed; Paclitaxel + carboplatin. Patients on cisplatin + etoposide combination will not be considered as it is the most commonly used combination therapy regimen for small cell lung cancer(Kalemkerian et al. Small cell lung cancer clinical practice guidelines in oncology. JNCCN Journal of the National Comprehensive Cancer Network. 2011;9:1086–113)

**Codes to be used for the identification of lung surgery1–3**

**ICD-9 codes:** 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.01, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.09, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.1, 32.2, 32.2, 32.2, 32.2, 32.2, 32.2, 32.2, 32.2, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.21, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.22, 32.23, 32.23, 32.23, 32.23, 32.23, 32.23, 32.23, 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32.49, 32.5, 32.5, 32.5, 32.59, 32.59, 32.59, 32.6, 32.6, 32.6, 32.6, 32.6, 32.6, 32.6, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9, 32.9. **ICD-10 codes:** 0B534ZZ, 0B538ZZ, 0B544ZZ, 0B548ZZ, 0B554ZZ, 0B558ZZ, 0B564ZZ, 0B568ZZ, 0B574ZZ, 0B578ZZ, 0B584ZZ, 0B588ZZ, 0B594ZZ, 0B598ZZ, 0B5B4ZZ, 0B5B8ZZ, 0BB34ZZ, 0BB38ZZ, 0BB44ZZ, 0BB48ZZ, 0BB54ZZ, 0BB58ZZ, 0BB64ZZ, 0BB68ZZ, 0BB74ZZ, 0BB78ZZ, 0BB84ZZ, 0BB88ZZ, 0BB94ZZ, 0BB98ZZ, 0BBB4ZZ, 0BBB8ZZ, 0B530ZZ, 0B533ZZ, 0B537ZZ, 0B540ZZ, 0B543ZZ, 0B547ZZ, 0B550ZZ, 0B553ZZ, 0B557ZZ, 0B560ZZ, 0B563ZZ, 0B567ZZ, 0B570ZZ, 0B573ZZ, 0B577ZZ, 0B580ZZ, 0B583ZZ, 0B587ZZ, 0B590ZZ, 0B593ZZ, 0B597ZZ, 0B5B0ZZ, 0B5B3ZZ, 0B5B7ZZ, 0BB30ZZ, 0BB33ZZ, 0BB37ZZ, 0BB40ZZ, 0BB43ZZ, 0BB47ZZ, 0BB50ZZ, 0BB53ZZ, 0BB57ZZ, 0BB60ZZ, 0BB63ZZ, 0BB67ZZ, 0BB70ZZ, 0BB73ZZ, 0BB77ZZ, 0BB80ZZ, 0BB83ZZ, 0BB87ZZ, 0BB90ZZ, 0BB93ZZ, 0BB97ZZ, 0BBB0ZZ, 0BBB3ZZ, 0BBB7ZZ, 0BT30ZZ, 0BT34ZZ, 0BT40ZZ, 0BT44ZZ, 0BT50ZZ, 0BT54ZZ, 0BT60ZZ, 0BT64ZZ, 0BT70ZZ, 0BT74ZZ, 0BT80ZZ, 0BT84ZZ, 0BT90ZZ, 0BT94ZZ, 0BTB0ZZ, 0BTB4ZZ, 0BBC4ZZ, 0BBD4ZZ, 0BBF4ZZ, 0BBG4ZZ, 0BBH4ZZ, 0BBJ4ZZ, 0BBK4ZZ, 0BBL4ZZ, 0BQK0ZZ, 0BQK3ZZ, 0BQK4ZZ, 0BQK7ZZ, 0BQK8ZZ, 0BQL0ZZ, 0BQL3ZZ, 0BQL4ZZ, 0BQL7ZZ, 0BQL8ZZ, 0BQM0ZZ, 0BQM3ZZ, 0BQM4ZZ, 0BQM7ZZ, 0BQM8ZZ, 0B5K0ZZ, 0B5K3ZZ, 0B5K7ZZ, 0B5L0ZZ, 0B5L3ZZ, 0B5L7ZZ, 0B5M0ZZ, 0B5M3ZZ, 0B5M7ZZ, 0BBK0ZZ, 0BBK3ZZ, 0BBK7ZZ, 0BBL0ZZ, 0BBL3ZZ, 0BBL7ZZ, 0BBM0ZZ, 0BBM3ZZ, 0BBM7ZZ, 0B5C0ZZ, 0B5D0ZZ, 0B5F0ZZ, 0B5G0ZZ, 0B5H0ZZ, 0B5J0ZZ, 0B5K0ZZ, 0B5L0ZZ, 0B5M0ZZ, 0B5C3ZZ, 0B5D3ZZ, 0B5F3ZZ, 0B5G3ZZ, 0B5H3ZZ, 0B5J3ZZ, 0B5K3ZZ, 0B5L3ZZ, 0B5M3ZZ, 0B5C4ZZ, 0B5D4ZZ, 0B5F4ZZ, 0B5G4ZZ, 0B5H4ZZ, 0B5J4ZZ, 0B5K4ZZ, 0B5L4ZZ, 0B5M4ZZ, 0B5C7ZZ, 0B5C8ZZ, 0B5D7ZZ, 0B5D8ZZ, 0B5F7ZZ, 0B5F8ZZ, 0B5G7ZZ, 0B5G8ZZ, 0B5H7ZZ, 0B5H8ZZ, 0B5J7ZZ, 0B5J8ZZ, 0B5K7ZZ, 0B5K8ZZ, 0B5L7ZZ, 0B5L8ZZ, 0B5M7ZZ, 0B5M8ZZ, 0B538ZZ, 0B548ZZ, 0B558ZZ, 0B568ZZ, 0B578ZZ, 0B588ZZ, 0B598ZZ, 0B5B8ZZ, 0B5C8ZZ, 0B5D8ZZ, 0B5F8ZZ, 0B5G8ZZ, 0B5H8ZZ, 0B5J8ZZ, 0B5K8ZZ, 0B5L8ZZ, 0B5M8ZZ, 0BBC8ZZ, 0BBD8ZZ, 0BBF8ZZ, 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0BBM7ZZ. **CPT codes:** 32441, 32442, 32443, 32444, 32445, 32446, 32447, 32448, 32449, 32450, 32451, 32452, 32453, 32454, 32455, 32456, 32457, 32458, 32459, 32460, 32461, 32462, 32463, 32464, 32465, 32466, 32467, 32468, 32469, 32470, 32471, 32472, 32473, 32474, 32475, 32476, 32477, 32478, 32479, 32480, 32481, 32482, 32483, 32484, 32485, 32486, 32487, 32488, 32489, 32490, 32491, 32492, 32493, 32494, 32495, 32496, 32497, 32498, 32499, 32500, 32501, 32502, 32503, 32504, 32505, 32506, 32507, 32508, 32509, 32510, 32511, 32512, 32513, 32514, 32515, 32516, 32517, 32518, 32519, 32520, 32521, 32522, 32523, 32524, 32525, 32657, 32663

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