

NSCLC stage III surgery vs. radiotherapy









Tnλ.: 210 6897552-3 Φαξ: 210 6897555 E-mail: info@gk.gr Site: www.gk.gr Ιωάννης Γεωργακόπουλος Επίκουρος Καθηγητής Ακτινοθεραπευτικής Ογκολογίας

Stage III NSCLC: A Heterogeneous Group

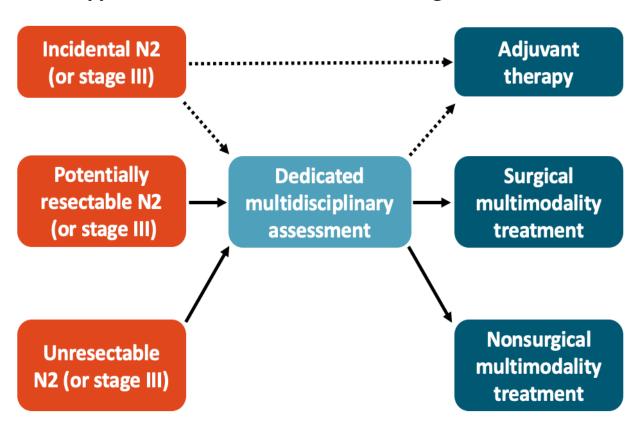
8th Edition AJCC/UICC Stage

T/M	Subgroup	N0	N1	N2	N3
T1	T1a T1b T1c	IA1 IA2 IA3	IIB IIB IIB	IIIA IIIA IIIA	IIIB IIIB IIIB
T2	T2a T2b	IB IIA	IIB IIB	IIIA	IIIB IIIB
T3	Т3	IIB	IIIA	IIIB	IIIC
T4	T4	IIIA	IIIA	IIIB	IIIC
M1	M1a M1b	IVA IVA	IVA IVA	IVA IVA	IVA IVA
	M1c	IVB	IVB	IVB	IVB

OS by Pathologic Stage

Stage	mOS, Mo	2-Yr OS, %	5-Yr OS, %
IIIA	41.9	65	41
IIIB	22.0	47	24
IIIC	11.0	30	12

Approach to Treatment Decisions for Stage III NSCLC



Van Meerbeeck. Eur J Cancer Suppl. 2013;11:150. Detterbeck. Chest. 2017;151:193. Goldstraw. J Thorac Oncol. 2016;11:39. Eberhardt. Ann Oncol. 2015;26:1573.

Stage III NSCLC

resectable?

8th Edition AJCC/UICC Stage

superior sulcus?

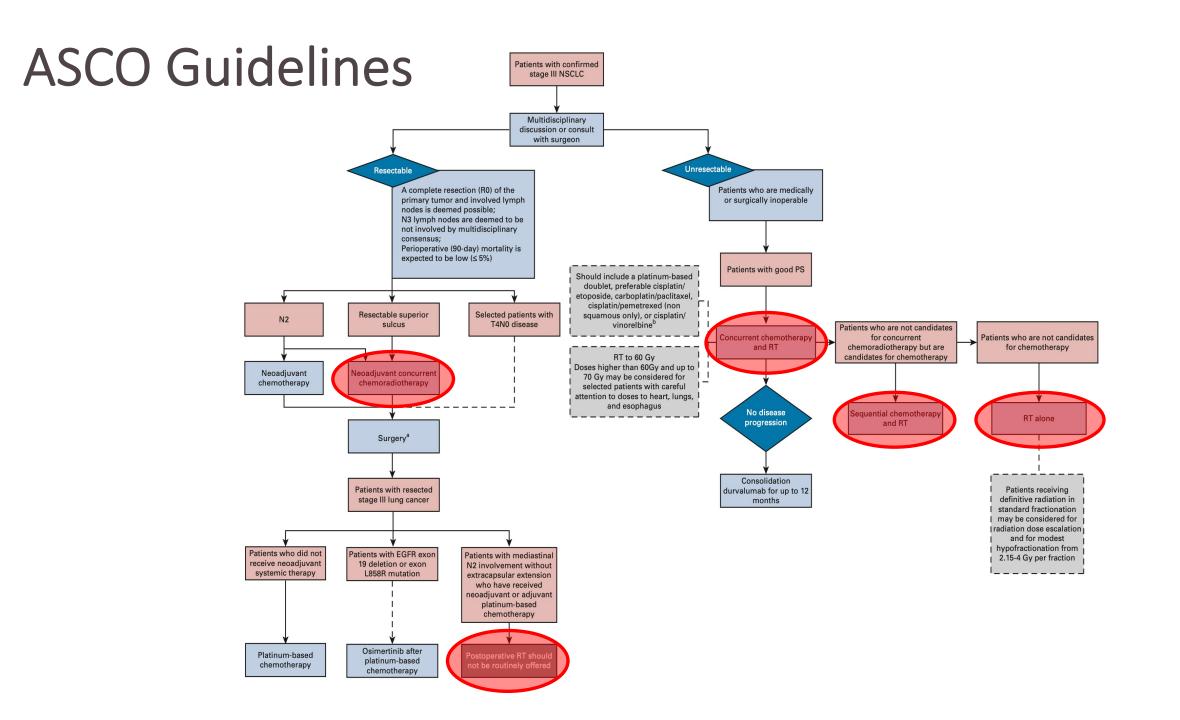
unresectable?

T/M	Subgroup	N0	N1	N2	N3
T1	T1a T1b T1c	IA1 IA2 IA3	IIB IIB IIB	IIIA IIIA IIIA	IIIB IIIB IIIB
T2	T2a	IB	IIB	IIIA	IIIB
	T2b	IIA	IIB	IIIA	IIIB
T3	T3	IIB	IIIA	IIIB	IIIC
T4	T4	IIIA	IIIA	IIIB	IIIC
M1	M1a M1b	IVA IVA	IVA IVA	IVA IVA	IVA IVA
	M1c	IVB	IVB	IVB	IVB

chest wall?

potentially resectable?

spine?

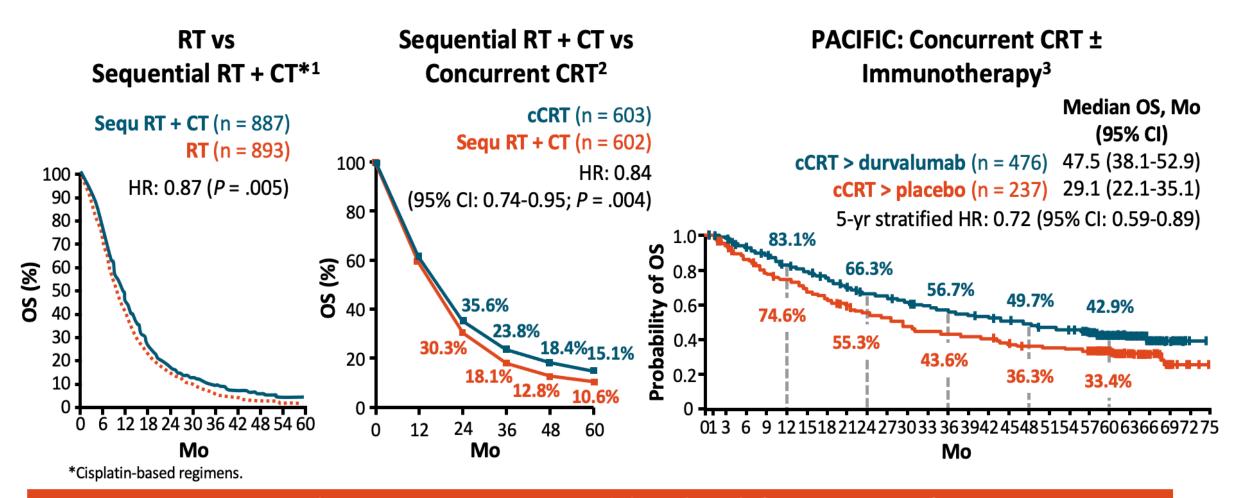


unresectable

median survival time improvement for St III NSCLC

Study	Publication Year	Systemic Therapy	Best MST (mo)
INT 0139	2009	CDDP VP-16 +/- SURG	24 (Lobectomy 34)
RTOG 9410	2011	CDDP Vinblastine	17.4
RTOG 0617	2015	Carbo / Taxol	28.7
PROCLAIM	2016	Pemetrexed CDDP CDDP VP-16 + consolidation Chemo	26.8
PACIFIC	2018	Carbo / Taxol +/- Durvalumab	> 45
NRG LU001 Phase II	2019	Carbo / Taxol +/- metformin	> 40

Unresectable Stage III NSCLC: Evolution of Treatment



In February 2018, FDA approved durvalumab for treatment of unresectable stage III NSCLC without disease progression following concurrent CRT

RT has improved as well

- target definition: locating tumor on CT simulation rather than landmarks
- volumetric (3D) rather than point (2D) dose prescription (conformal 3D; IMRT;
 VMAT; protons)
- use of lower photon energy (6-10 MV)
- heterogeneity correction: (lung vs. tumor density)
- accounting for motion: 4D CT simulation
- not missing the tumor during daily RT: IGRT
- understanding normal tissue tolerance (lung V20)
- limiting breaks during treatment course

PACIFIC: Study Design

Randomized, double-blind, placebo-controlled phase III trial

Stratified by age (< 65 vs \geq 65 yrs), sex, and smoking history (current/former vs never) Adult patients with locally **Durvalumab** 10 mg/kg IV Q2W advanced, unresectable for up to 12 mos 1-42 days stage III NSCLC with (n = 473)Until disease ≥ 2 cycles platinum-based post progression or chemotherapy with radiation concurrent unacceptable toxicity Placebo IV Q2W **CRT** therapy and no progression, for up to 12 mos WHO PS 0/1 (n = 236)(N = 713)

- Primary endpoints: PFS by BICR per RECIST v1.1, OS
- Secondary endpoints including: ORR, DoR, TTDM, PFS2, safety, PROs