#1251; A **phase II trial** of induction chemotherapy (IC), photon-, proton- and carbon ion-based radiotherapy (RT) integration in **locally advanced inoperable sinonasal epithelial tumors** patients (pts).

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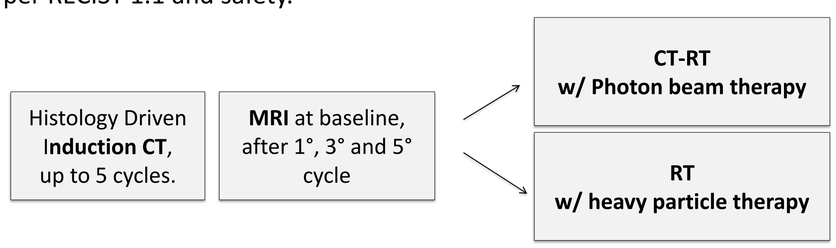
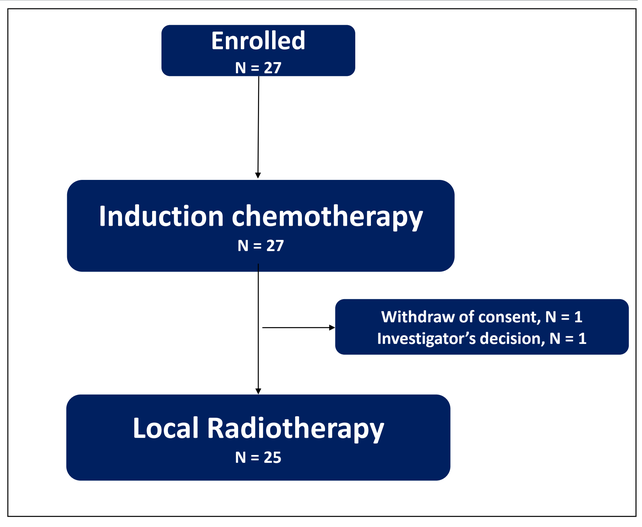
Background and Methods

- **Sinonasal epithelial tumors are rare** diseases with several histotypes and poor prognosis (5-year reported PFS less than 15%).
- Multimodal approach including surgery is widely used, although **no standard therapy has been established in prospective trials**.
- This study single-arm, phase II, multicenter clinical trial assessed activity and safety of an innovative integration of multimodality treatment with IC and RT modulated by histology, molecular profile, response to IC.
- Pts was treated with **up to 5 IC cycles**, whose regimen was selected according to histotype, **followed either by curative radio-chemotherapy** (CRT) **or RT**.
- **Photon and/or proton/carbon ion-based RT was employed** according to disease site and stage.
- Primary endpoint was 5 years PFS, secondary endpoints were OS, IC ORR per RECIST 1.1 and safety.





In the first prospective study, A ***multimodal approach*** provide survival rates only slightly greater than previous experiences, underscoring the **need for further treatment improvement**.

Response to IC confirmed its predictive value on survival.

	ALL TYPES (25)	%	SCC (5)	SNUC (11)	ITAC (3)	SNEC (3)	ONB (3)
IC SCHEME			TPF*	TPF*	PFL†	EP/AI‡	EP/AI‡
RESPONSE RATE	10	40	0	7 (64%)	0	3 (100%)	0
CR	2	8	0	2	0	0	0
PR	8	32	0	5	0	3	0
SD	14	56	4	4	3	0	3
PD	1	4	1	0	0	0	0

*Docetaxel, cisplatin, 5fluorouracil; †Cisplatin, 5fluorouracil, Leucovorin; ‡ Cisplatin, Etoposide alternated to Doxorubicin; Ifosfamide. SCC: squamous cell carcinoma; ITAC: p53 wild type intestinal type adenocarcinoma; SNUC: sinonasal undifferentiated carcinoma; SNEC: sinonasal neuroendocrine carcinoma; ONB: olfactory neuroblastoma Hyams grade III-IV.

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Results

- Out of 27 enrolled pts, 25 resulted evaluable for primary endpoint.
- **3% of pts with G3-4 adverse event during IC**. No treatment related death was recorded.
- At a median follow up of 27 months, **5 G3-4 RT induced late adverse events have been recorded** (1 case of G3 neurotoxicity, 2 cases of G3 hearing impairment, 2 cases of G3 xerostomia).
- Five-year PFS - OS for pts achieving PR/CR vs SD/PD to IC were 26.7% - 33.3% vs 30.8% - 17.9%, respectively.