

Table I. Baseline characteristics of the patients (n=1,238).

Characteristics	Value
Age, years	42.82±10.70
Male sex	915 (73.91)
Ear symptom	506 (40.87)
Allergy history	93 (7.51)
Smoking	357 (28.84)
BMI, kg/m ²	23.05±3.41
Pretreatment mastoid mucosa disease	
0	887 (71.65)
1	80 (6.46)
2	271 (21.89)
T stage	
1-2	275 (22.21)
3-4	963 (77.79)
N stage	
0	138 (11.15)
1-3	1,100 (88.85)
Stage	
I-II	161 (13.00)
III-IV	1,077 (87.00)
Ipsilateral wall	897 (72.46)
PR	956 (77.22)
POET	523 (42.25)
LVPM	713 (57.59)
TVPM	460 (37.16)
IMRT	1,162 (93.86)
Mastoid Dmean, Gy	37.87±6.68
Mastoid volume, mm ²	13.73±4.81
Total dose, Gy	69.73±1.08
Total fractions	31.10±1.36
Chemotherapy	1,145 (92.49)
Targeted therapy	229 (18.50)
Recurrence of nasopharynx	116 (9.37)
Reradiation	67 (5.41)
Budesonide	528 (42.65)
Ambroxol	733 (59.21)
Myrtol	237 (19.14)
Clarityne	133 (10.74)
Nasal irrigation	635 (51.29)
WBC, x10 ⁹ /l	6.10±2.63
Neutrophils, x10 ⁹ /l	3.79±2.29
Monocytes, x10 ⁹ /l	0.50±1.58
Lymphocytes, x10 ⁹ /l	1.71±0.65
Eosinophils, x10 ⁹ /l	0.11±0.12

SAA, mg/l	9.23±31.13
CRP, mg/l	4.34±9.79
LDH, U/l	178.12±49.27

Values are expressed as the mean ± standard deviation or n (%). BMI, body mass index; PR, pharyngeal recess; POET, pharyngeal opening of eustachian tube; LVPM, levator veli palatine muscle; TVPM, tensor veli palatine muscle; IMRT, intensity modulated radiotherapy; mastoid Dmean, mean dose to the ipsilateral mastoid; WBC, white blood cell; SAA, serum amyloid A; CRP, C-reactive protein; LDH, lactate dehydrogenase.

Table SII. ROC curve of mastoid parameters significantly associated with persistent Grade 2 mastoid mucosa disease for patients with nasopharyngeal carcinoma without pretreatment mastoiditis and nasopharyngeal recurrence.

Variable	AUC	95%CI	Cutoff point	Sensitivity	Specificity
Mastoid Dmean	0.58	0.52-0.64	37.30 Gy	0.48	0.67
Mastoid volume	0.53	0.47-0.58	18.45 mm ²	0.88	0.20

ROC, receiver operating characteristic; AUC, area under the ROC curve; mastoid Dmean, mean dose to the ipsilateral mastoid; mastoid volume, the volume of the ipsilateral mastoid.