

Comparaison des toxicités aiguës de la Radiothérapie ORL entre fumeurs et non- fumeurs : une étude prospective monocentrique.

Camille Invernizzi, 24 Novembre 2023



Introduction

Objectifs

Matériel & Méthodes

Résultats

Discussion

Conclusion

Absence de lien d'intérêt.

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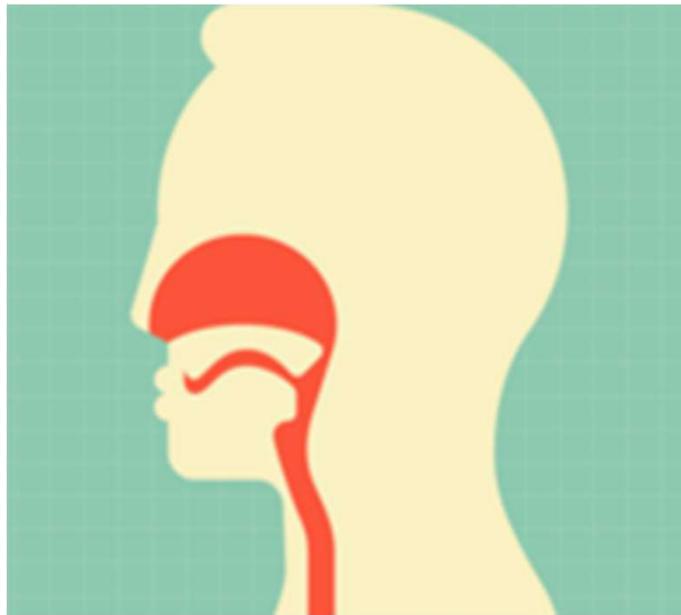
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Cancers ORL



Source : Institut National du Cancer

Epidémiologie

890 000

*Nouveaux cas par an de
cancers ORL dans le monde*

507 000 décès

8 Millions

*Décès par an dûs au **tabac**
dans le monde*

**1^{ère} cause de décès
évitables**

Indications de traitement

Stades I-II
cT1-T2 N0



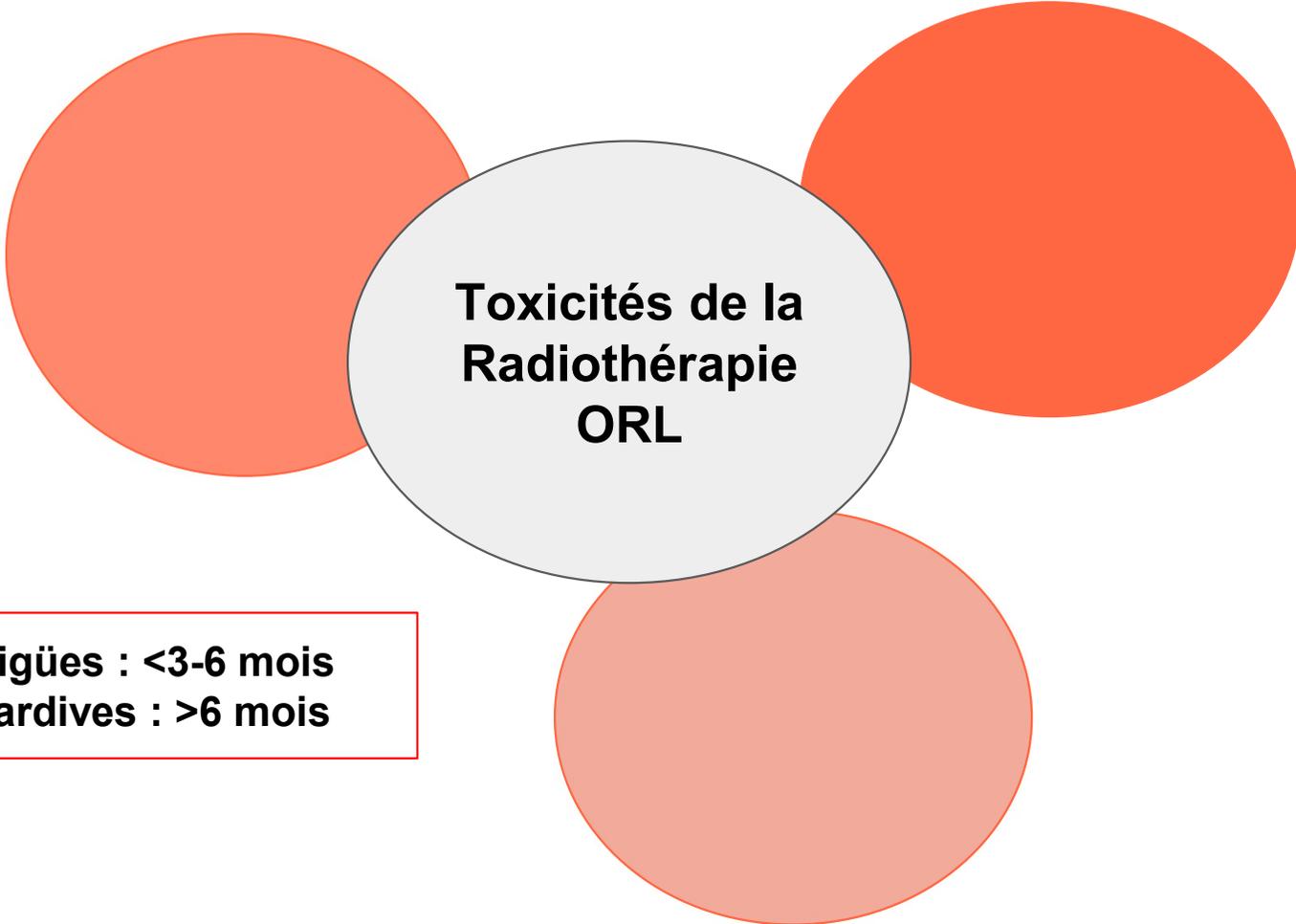
- ✓ Chirurgie
- ✓ Radiothérapie +/- CT

Stades III-IV
cT3-T4 et/ou N+



- ✓ Chirurgie puis (chimio)radiothérapie
- ✓ Radio-chimiothérapie (RTCT)

Facteurs influençant les toxicités de la RT ORL



**Toxicités de la
Radiothérapie
ORL**

Aigües : <3-6 mois
Tardives : >6 mois

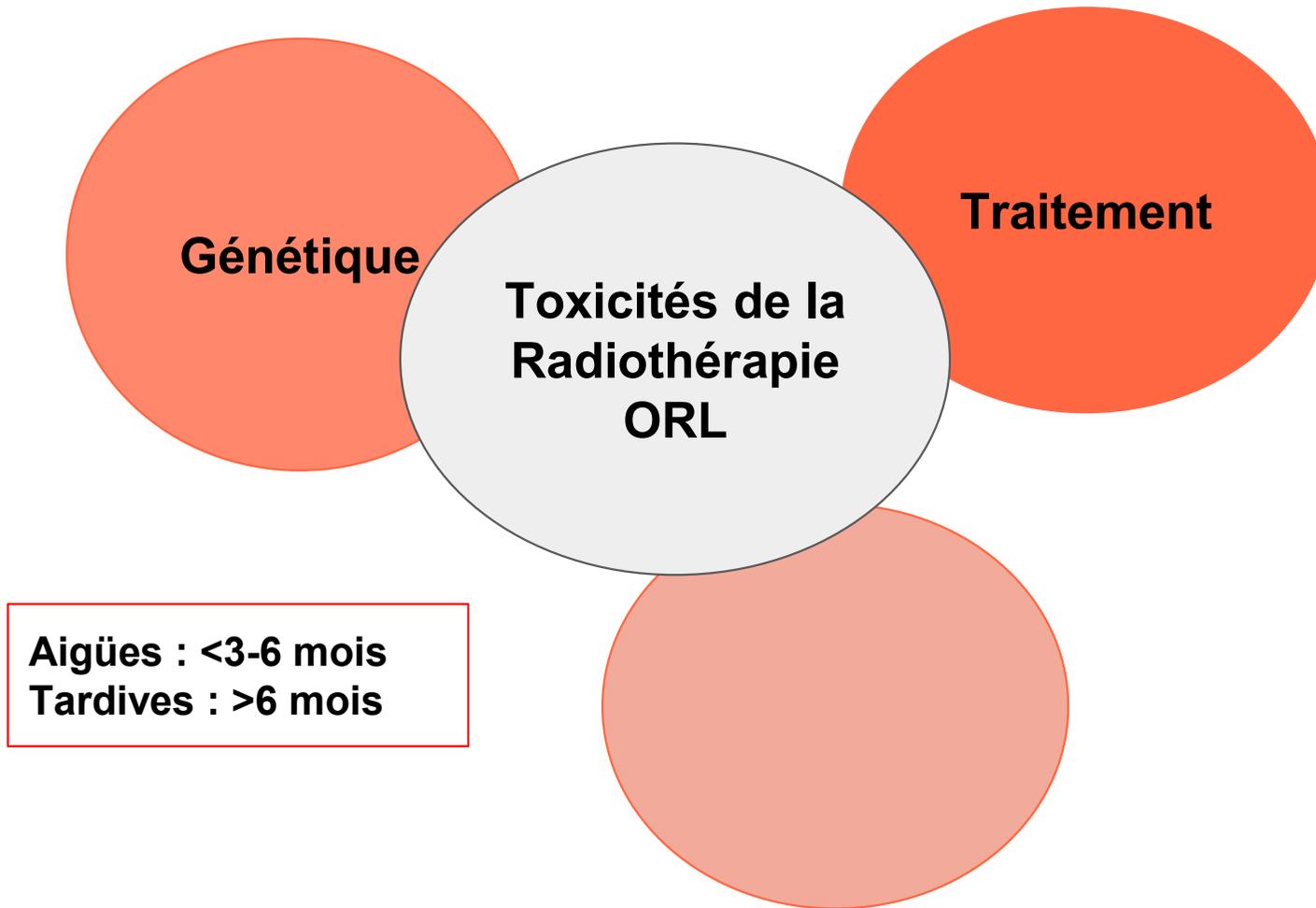
Facteurs influençant les toxicités de la RT ORL

Génétique

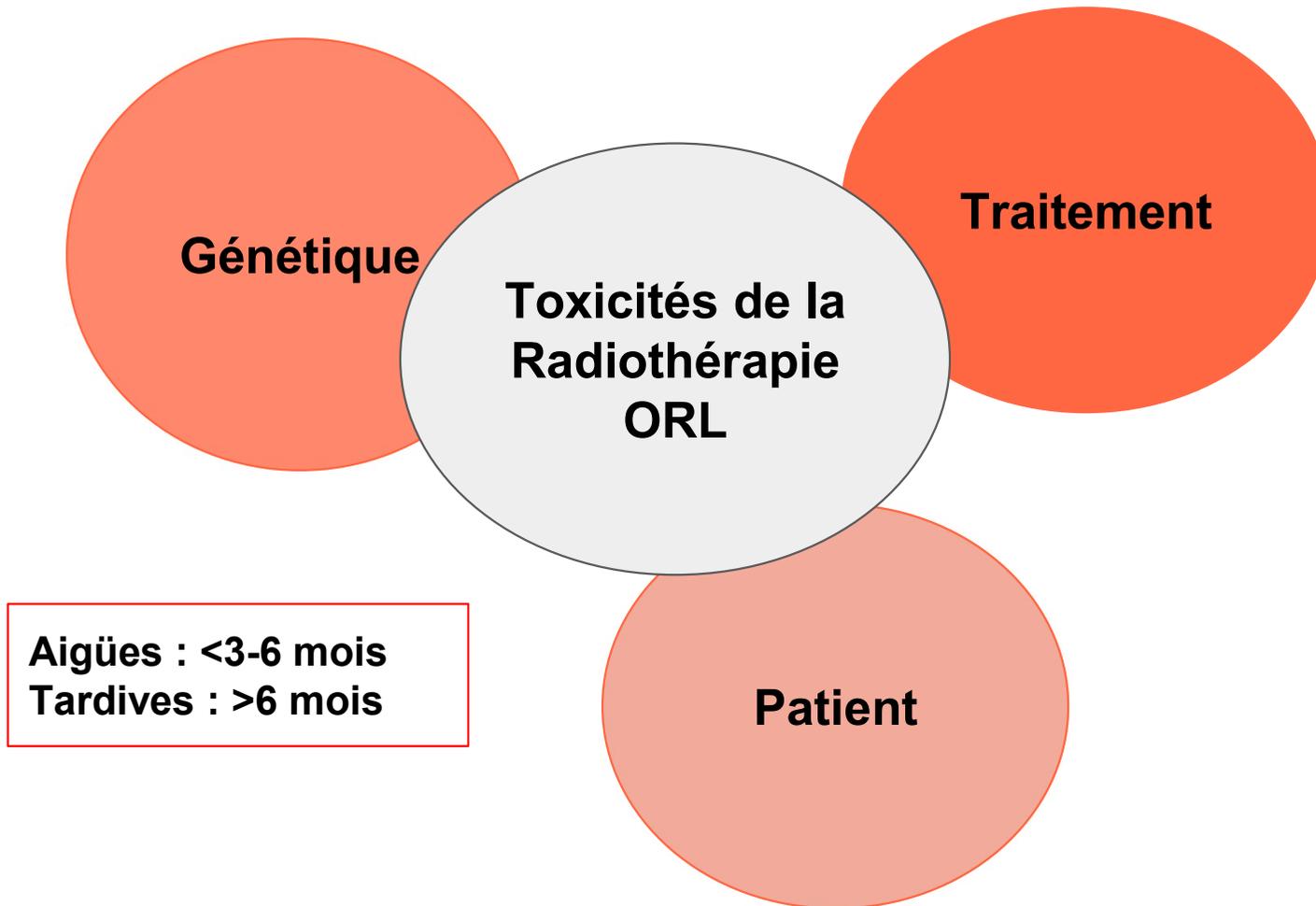
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Tardives : >6 mois**

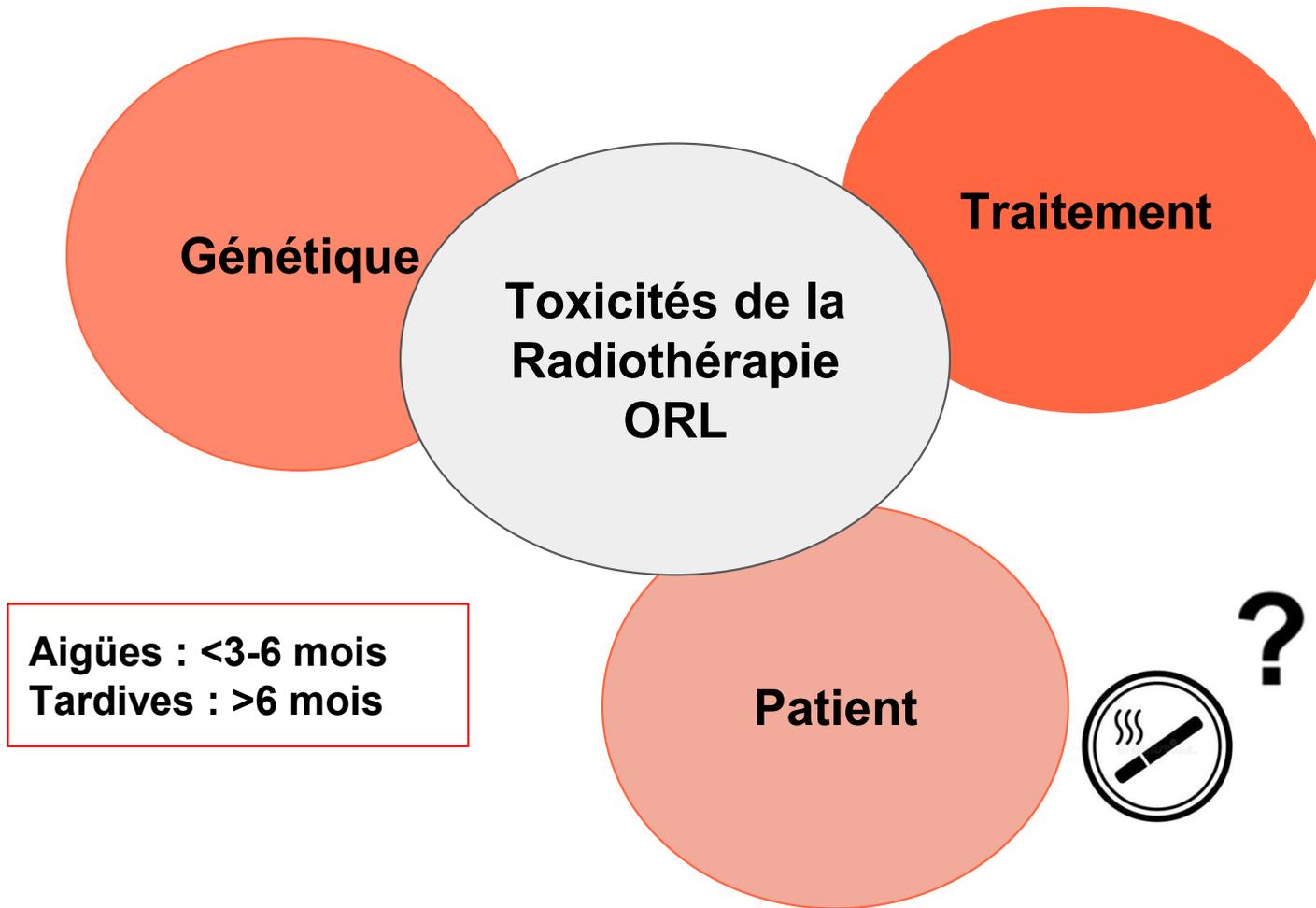
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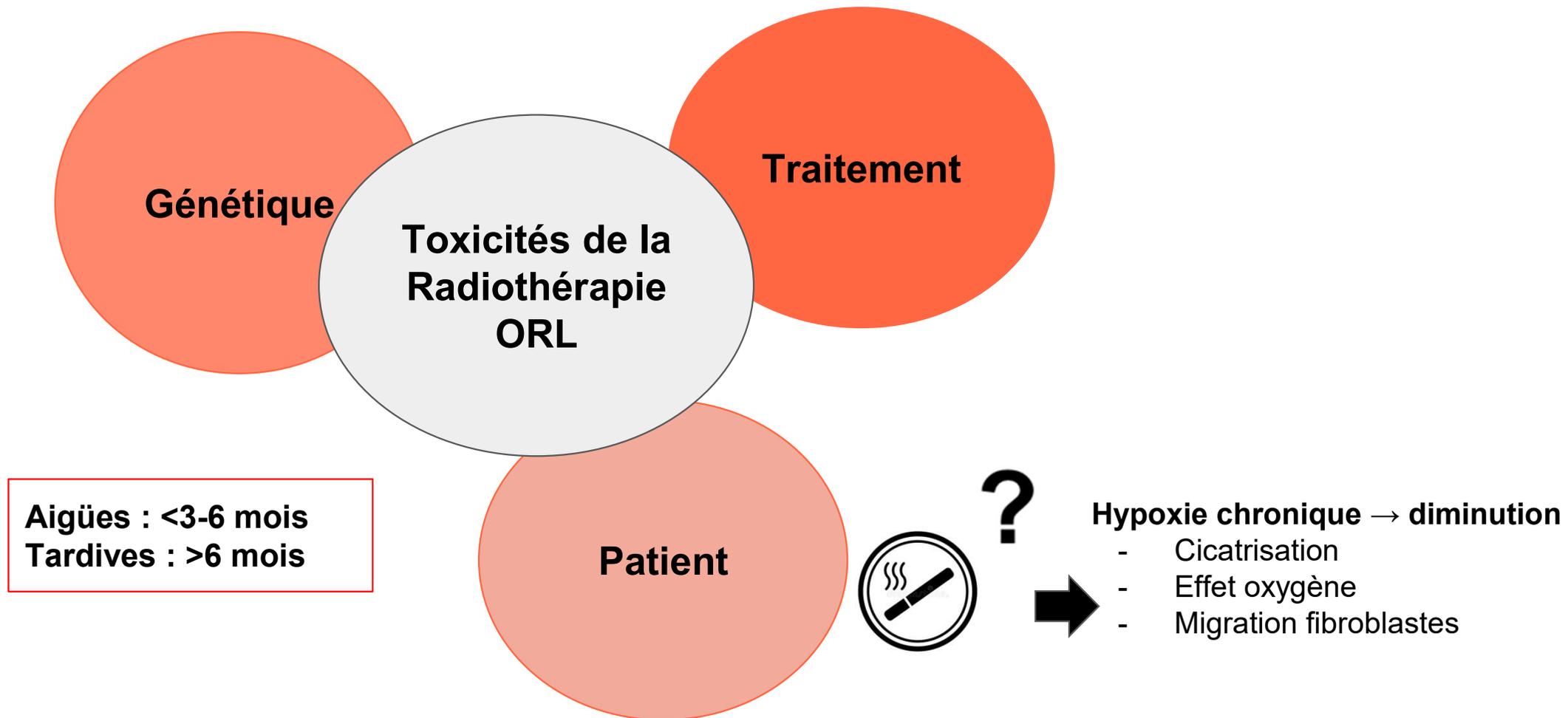


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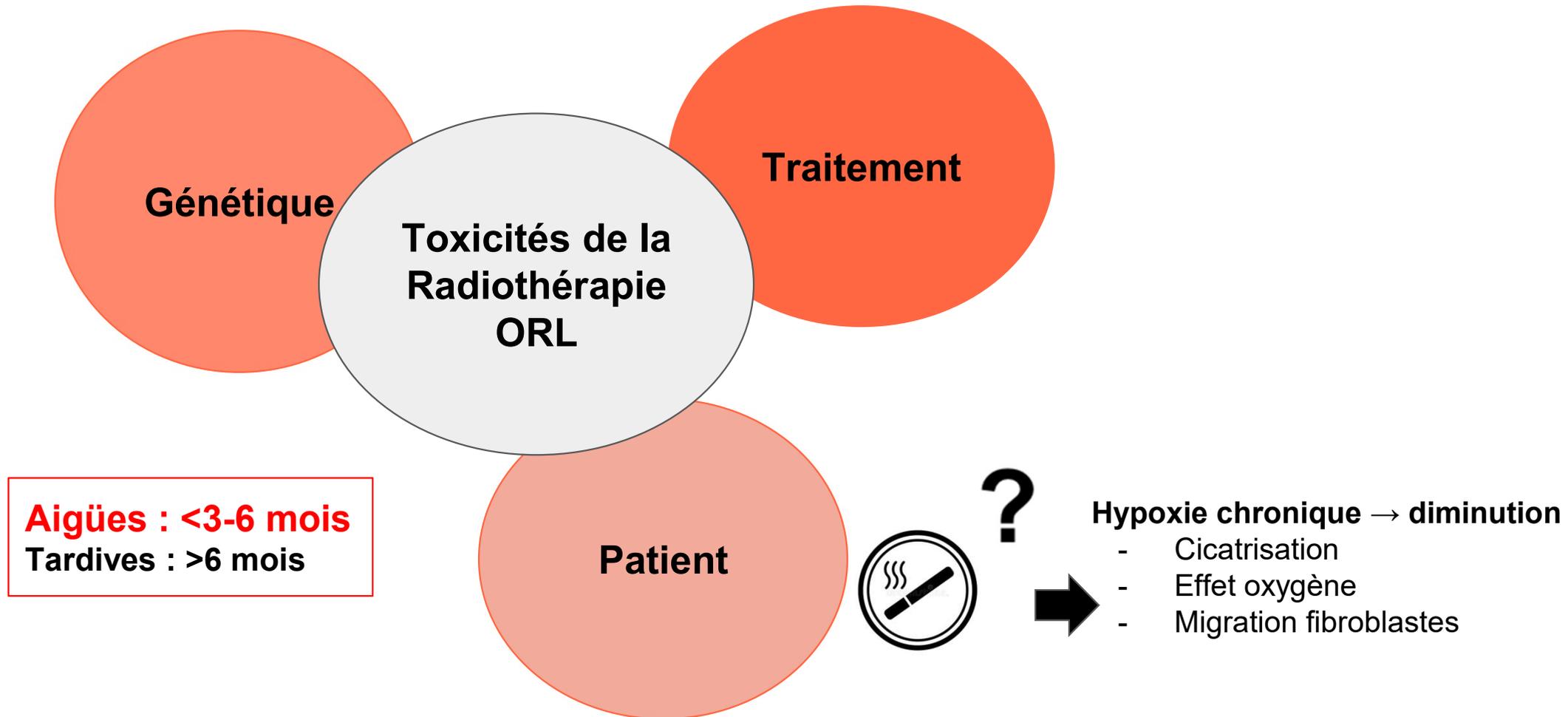


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Facteurs influençant les toxicités de la RT ORL



Facteurs influençant les toxicités de la RT ORL



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Tabagisme et toxicités aiguës radio-induites



de dermatites

Tabagisme et toxicités aiguës radio-induites



de dermites



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Objectifs de l'étude

- ❑ **Objectif principal** : Étudier l'association entre le **tabagisme actif** et la survenue d'au moins une **toxicité aiguë** (mucite et/ou dermite et/ou dysphagie) de grade 3-4 du CTCAE v.5.0

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- ❑ **Objectifs secondaires** :
 - ❑ Étudier l'association entre le **tabagisme actif** et la survenue d'une **mucite**, d'une **dermite** et d'une **dysphagie aiguës** de grade 3-4 du CTCAE v.5.0

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- ❑ **Objectif principal** : Étudier l'association entre le **tabagisme actif** et la survenue d'au moins une **toxicité aiguë** (mucite et/ou dermite et/ou dysphagie) de grade 3-4 du CTCAE v.5.0

- ❑ **Objectifs secondaires** :
 - ❑ Étudier l'association entre le **tabagisme actif** et la survenue d'une **mucite**, d'une **dermite** et d'une **dysphagie aiguës** de grade 3-4 du CTCAE v.5.0
 - ❑ Rechercher d'**autres facteurs associés** à la survenues de toxicités aiguës de grade 3-4 du CTCAE v.5.0

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Matériels et Méthodes

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❑ Critères d'inclusion

- Indication de Radiothérapie pour un cancer ORL
- Dose \geq 66 Gy

❑ Critères d'exclusion

- Traitement antérieur de Radiothérapie ORL

Données recueillies

- ❑ **Patient** : âge, Performans Status, IMC, statut tabagique, OH, dénutrition, diabète, prise de Metformine
- ❑ **Tumeur** : cTNM, pTNM, histologie, stade, localisation, p16, marges de résection
- ❑ **Traitement** : type (chirurgie, CT, RTCT), nombre de cycles de CT, curage, dose totale, étalement, technique, suspension et arrêt des traitements, hospitalisation, V20 et V30 cavité buccale

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Déroulement d'une inclusion

Consultation
d'annonce



Scanner de
centrage

Début du
traitement

Évaluations
hebdomadaires



Fin du
traitement

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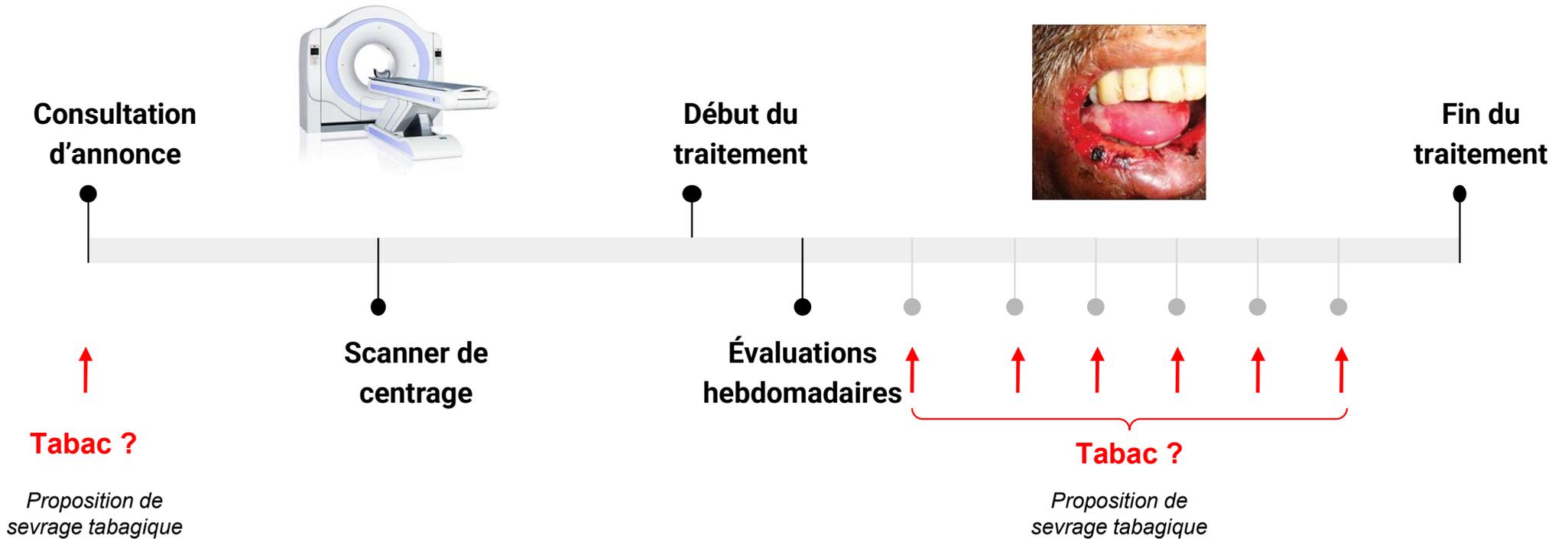
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Statut tabagique

✓ Fumeurs actifs

✓ Anciens fumeurs sevrés
✓ N'ayant jamais fumé

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Statut tabagique

Fumeurs actifs

✓ Fumeurs actifs

Non-Fumeurs

✓ Anciens fumeurs sevrés
✓ N'ayant jamais fumé

Statut tabagique

Fumeurs actifs

✓ Fumeurs actifs

- + reprise du tabac
- + arrêt du tabac en cours de RT

Non-Fumeurs

- ✓ Anciens fumeurs sevrés
- ✓ N'ayant jamais fumé

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Flow chart de l'étude

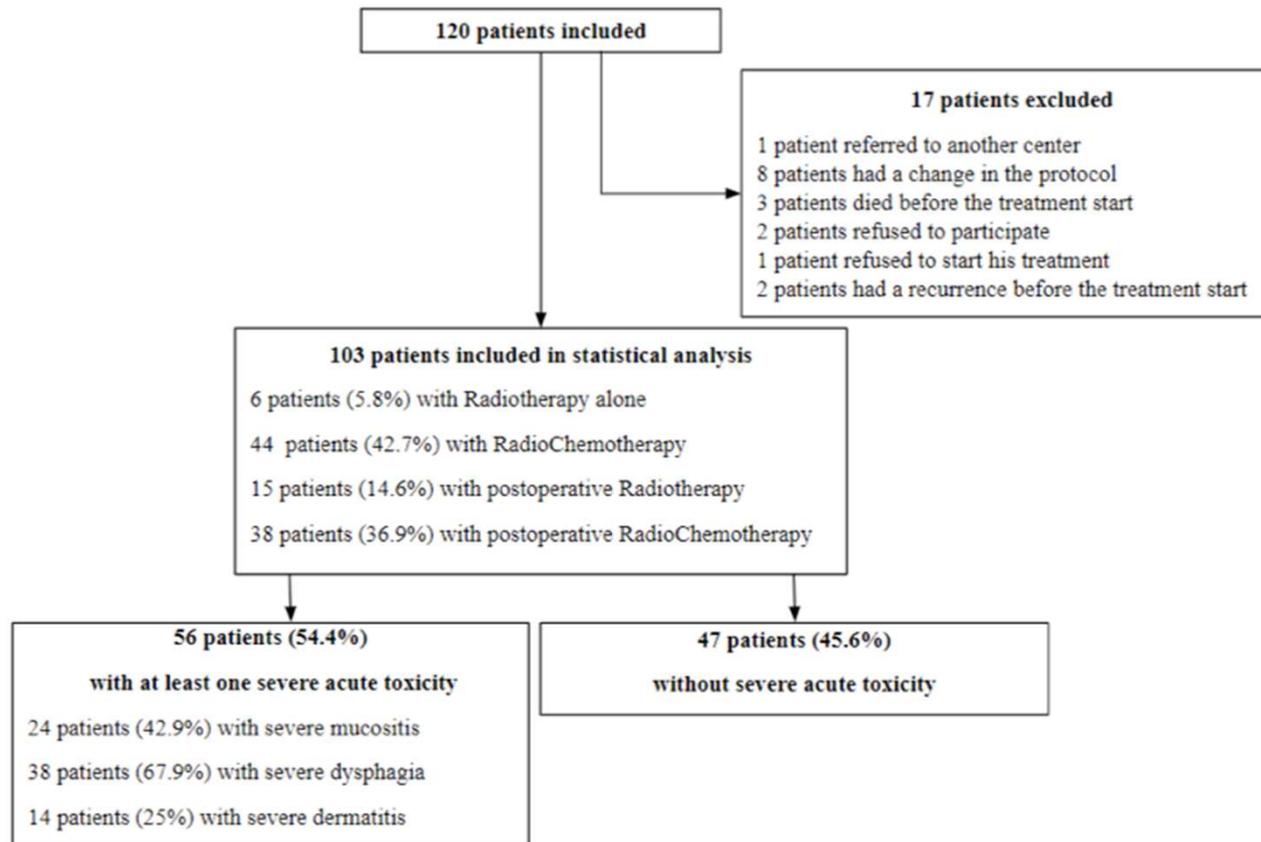


Figure 1. Flow chart of the study

Population

Table 1. Baseline characteristics of patients, pathological features and treatments

	N(%) unless otherwise indicated		
Age, means±SD, years	63.0±8.9	Cancer localization	
BMI, means±SD, kg/m²	24.5±5.3	Oropharynx	32 (31.1)
Malnutrition¹	15 (14.6)	Larynx	18 (17.5)
Sex		Oral cavity	31 (30.1)
Women	27 (26.2)	Hypopharynx	15 (14.6)
Men	76 (73.8)	Others ²	7 (6.8)
Performance status		Type of treatment	
0	33 (32.0)	Radiotherapy alone	6 (5.8)
1	60 (58.3)	Radiochemotherapy	44 (42.7)
2	9 (8.7)	Postoperative radiotherapy	15 (14.6)
3	1 (1.0)	Postoperative radiochemotherapy	38 (36.9)
4	0 (0.0)	Surgery	53 (51.5)
Smoking status		Type of resection	
Never smokers	14 (13.6)	R0	25 (47.2)
Former smokers	60 (58.2)	R1	25 (47.2)
Active smokers	29 (28.2)	R2	3 (5.6)
Number of pack-years, median [IQR]	40 [35-50]	Systemic therapy	
Number of cigarettes/day, median [IQR]	6 [3-10]	Chemotherapy	72 (69.9)
Alcohol status		Cisplatin 100 mg/m ²	66 (91.7)
Never drinkers	38 (36.9)	Number of CDDP	
Former drinkers	29 (28.2)	1	6 (9.2)
Current drinkers	36 (34.9)	2	29 (44.6)
Diabetes	14 (13.6)	3	30 (46.1)
Metformin taking	12 (11.7)	Cisplatin 40 mg/m ²	3 (4.2)
cT		Carboplatin AUC 2	1 (1.4)
T1	10 (9.7)	Carboplatin AUC 5	2 (2.8)
T2	23 (22.3)	Cetuximab	10 (9.7)
T3	28 (27.2)	Radiotherapy	
T4	37 (35.9)	Overall duration of radiotherapy, means±SD, days	48±7
Tx	5 (4.9)	Total dose	
cN		70 Gy	57 (55.3)
N0	40 (38.8)	66 Gy	46 (44.7)
N1	8 (7.8)	Fractionation schedule	
N2	46 (44.7)	2.12 Gy by fraction	56 (54.4)
N3	8 (7.8)	2 Gy by fraction	47 (45.6)
Nx	1 (1.0)	Total suspension of radiotherapy	24 (23.3)
pT²		Number of days of suspension, median [IQR]	3 [3-5]
T1	3 (5.7)	Technique of radiotherapy	
T2	15 (28.3)	Tomotherapy	84 (81.6)
T3	19 (35.8)	VMAT	19 (18.4)
T4	14 (26.4)	OAR doses	
Tx	2 (3.8)	V20 oral cavity, means±SD, %	83.2±22.5
pN²		V30 oral cavity, means±SD, %	68.0±30.7
0	17 (32.1)		
1	9 (17.0)		
2	13 (24.5)		
3	12 (22.6)		
Nx	2 (3.8)		
Stage			
I/II	27 (26.2)		
III/IV	76 (73.8)		
HPV status³			
Positive	14/32 (43.7)		
Negative	18/32 (56.3)		

Population

Table 1. Baseline characteristics of patients, pathological features and treatments

	N(%) unless otherwise indicated		
Age, means±SD, years		63.0±8.9	
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Sex			
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Men	76 (73.8)		
Performance status			
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Cancer localization			
Oropharynx		32 (31.1)	
Larynx		18 (17.5)	
Oral cavity		31 (30.1)	
Hypopharynx		15 (14.6)	
Others ⁴		7 (6.8)	
Type of treatment			
Radiotherapy alone		6 (5.8)	
Radiochemotherapy		44 (42.7)	
Postoperative radiotherapy		15 (14.6)	
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Surgery		53 (51.5)	
Type of resection			
R0		25 (47.2)	
R1		25 (47.2)	
R2		3 (5.6)	
Systemic therapy			
Chemotherapy		72 (69.9)	
Cisplatin 100 mg/m ²		66 (91.7)	
Number of CDDP			
1		6 (9.2)	
2		29 (44.6)	
3		30 (46.1)	
Cisplatin 40 mg/m ²		3 (4.2)	
Carboplatin AUC 2		1 (1.4)	
Carboplatin AUC 5		2 (2.8)	
Cetuximab		10 (9.7)	
Radiotherapy			
Overall duration of radiotherapy, means±SD, days		48±7	
Total dose			
70 Gy		57 (55.3)	
66 Gy		46 (44.7)	
Fractionation schedule			
2.12 Gy by fraction		56 (54.4)	
2 Gy by fraction		47 (45.6)	
Total suspension of radiotherapy		24 (23.3)	
Number of days of suspension, median [IQR]		3 [3-5]	
Technique of radiotherapy			
Tomotherapy		84 (81.6)	
VMAT		19 (18.4)	
OAR doses			
V20 oral cavity, means±SD, %		83.2±22.5	
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Radiotherapy

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Total dose	
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66 Gy	46 (44.7)

Fractionation schedule

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Total suspension of radiotherapy

Number of days of suspension, median [IQR]	24 (23.3)
--------------------------------------------	-----------

Technique of radiotherapy

Tomotherapy	84 (81.6)
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OAR doses

V20 oral cavity, means±SD, %	83.2±22.5
V30 oral cavity, means±SD, %	68.0±30.7

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Table 1. Baseline characteristics of patients, pathological features and treatments

	N(%) unless otherwise indicated		
Age, means±SD, years	63.0±8.9	Cancer localization	
BMI, means±SD, kg/m ²	24.5±5.3	Oropharynx	32 (31.1)
Malnutrition ¹	15 (14.6)	Larynx	18 (17.5)
Sex		Oral cavity	31 (30.1)
Women	27 (26.2)	Hypopharynx	15 (14.6)
Men	76 (73.8)	Others ⁴	7 (6.8)
Performance status		Type of treatment	
0	33 (32.0)	Radiotherapy alone	6 (5.8)
1	60 (58.3)	Radiochemotherapy	44 (42.7)
2	9 (8.7)	Postoperative radiotherapy	15 (14.6)
		Postoperative radiochemotherapy	38 (36.9)
Smoking status		Surgery	53 (51.5)
Never smokers	14 (13.6)	Type of resection	
Former smokers	60 (58.2)	R0	25 (47.2)
Active smokers	29 (28.2)	R1	25 (47.2)
Number of pack-years, median [IQR]	40 [35-50]	R2	3 (5.6)
Number of cigarettes/day, median [IQR]	6 [3-10]	Systemic therapy	
Former drinkers	29 (28.2)	Chemotherapy	72 (69.9)
Current drinkers	36 (34.9)	Cisplatin 100 mg/m ²	66 (91.7)
Diabetes	14 (13.6)	Number of CDDP	
Metformin taking	12 (11.7)	1	6 (9.2)
cT		2	29 (44.6)
T1	10 (9.7)	3	30 (46.1)
T2	23 (22.3)	Cisplatin 40 mg/m ²	3 (4.2)
T3	28 (27.2)	Carboplatin AUC 2	1 (1.4)
T4	37 (35.9)	Carboplatin AUC 5	2 (2.8)
Tx	5 (4.9)	Cetuximab	10 (9.7)
cN		Radiotherapy	
N0	40 (38.8)	Overall duration of radiotherapy, means±SD, days	48±7
N1	8 (7.8)	Total dose	
N2	46 (44.7)	70 Gy	57 (55.3)
N3	8 (7.8)	66 Gy	46 (44.7)
Nx	1 (1.0)	Fractionation schedule	
pT²		2.12 Gy by fraction	56 (54.4)
T1	3 (5.7)	2 Gy by fraction	47 (45.6)
T2	15 (28.3)	Total suspension of radiotherapy	24 (23.3)
T3	19 (35.8)	Number of days of suspension, median [IQR]	3 [3-5]
T4	14 (26.4)	Technique of radiotherapy	
Tx	2 (3.8)	Tomotherapy	84 (81.6)
pN²		VMAT	19 (18.4)
0	17 (32.1)	OAR doses	
1	9 (17.0)	V20 oral cavity, means±SD, %	83.2±22.5
2	13 (24.5)	V30 oral cavity, means±SD, %	68.0±30.7
3	12 (22.6)		
Nx	2 (3.8)		
Stage			
I/II	27 (26.2)		
III/IV	76 (73.8)		
HPV status³			
Positive	14/32 (43.7)		
Negative	18/32 (56.3)		

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Table 2. Baseline characteristics of patients, pathological features and treatments according to smoking status

	Active Smokers N=29	Non-active Smokers N=74	P-value
Age, means±SD, years	59.3±8.8	64.4±8.6	0.009
BMI, means±SD, kg/m²	22.5±5.1	25.3±5.1	0.01
Malnutrition¹	7 (24.1)	8 (10.8)	0.12
Sex			0.84
Women	8 (27.6)	19 (25.7)	
Men	21 (72.4)	55 (74.3)	
Performance status			0.05
0	7 (24.1)	26 (35.1)	
1	22 (75.9)	38 (51.3)	
2	0 (0.0)	9 (12.2)	
3	0 (0.0)	1 (1.4)	
4	0 (0.0)	0 (0.0)	
Alcohol status			0.002
Never drinkers/former drinkers	12 (41.4)	55 (74.3)	
Current drinkers	17 (58.6)	19 (25.7)	
Diabetes	1 (3.4)	13 (17.6)	0.11
Metformin taking	1 (100.0)	11 (84.6)	1.00
cT			0.18
T1	1 (3.4)	9 (12.2)	
T2	7 (24.1)	16 (21.6)	
T3	12 (41.4)	16 (21.6)	
T4	9 (31.0)	28 (37.8)	
Tx	0 (0.0)	5 (6.8)	
cN			0.90
N0	10 (34.5)	30 (40.5)	
N1	2 (6.9)	6 (8.1)	
N2	14 (48.3)	32 (43.2)	
N3	3 (10.3)	5 (6.8)	
Nx	0 (0.0)	1 (1.3)	
pT²			0.89
T1	0/7 (0.0)	3/46 (6.5)	
T2	2/7 (28.6)	13/46 (28.3)	
T3	2/7 (28.6)	17/46 (37.0)	
T4	3/7 (42.8)	11/46 (23.9)	
Tx	0/7 (0.0)	2/46 (4.3)	
pN²			0.31
0	1/7 (14.3)	16/46 (34.8)	
1	1/7 (14.3)	8/46 (17.4)	
2	3/7 (42.8)	10/46 (21.7)	
3	1/7 (14.3)	11/46 (23.9)	
Nx	1/7 (14.3)	1/46 (2.2)	
HVP status³			0.04
Positive	1/8 (12.5)	13/24 (54.2)	
Negative	7/8 (87.5)	11/24 (45.8)	

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Alcohol status			0.002
Never drinkers/former drinkers	12 (41.4)	55 (74.3)	
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N0	10 (34.5)	30 (40.5)	
N1	2 (6.9)	6 (8.1)	
N2	14 (48.3)	32 (43.2)	
N3	3 (10.3)	5 (6.8)	
Nx	0 (0.0)	1 (1.3)	
pT²			0.89
T1	0/7 (0.0)	3/46 (6.5)	
T2	2/7 (28.6)	13/46 (28.3)	
T3	2/7 (28.6)	17/46 (37.0)	
T4	3/7 (42.8)	11/46 (23.9)	
Tx	0/7 (0.0)	2/46 (4.3)	
pN²			0.31
0	1/7 (14.3)	16/46 (34.8)	
1	1/7 (14.3)	8/46 (17.4)	
2	3/7 (42.8)	10/46 (21.7)	
3	1/7 (14.3)	11/46 (23.9)	
Nx	1/7 (14.3)	1/46 (2.2)	
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Performance status			0.05
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0	1/7 (14.3)	16/46 (34.8)	
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cN			0.90
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Tx	0/7 (0.0)	2/46 (4.3)	
pN²			0.31
0	1/7 (14.3)	16/46 (34.8)	
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HVP status³			0.04
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Women	8 (27.6)	19 (25.7)	
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3	0 (0.0)	1 (1.4)	
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3	1/7 (14.3)	11/46 (23.9)	
HVP status³			0.04
Positive	1/8 (12.5)	13/24 (54.2)	
Negative	7/8 (87.5)	11/24 (45.8)	

Critère de jugement principal

Table 3. Events rates in smokers and non-smokers patients

	Events (%)		P-value	Adjusted-OR (95% CI)	P-value*
	Active Smokers N=29	Non-active Smokers N=74			
Severe acute toxicity	18 (62.1)	38 (51.3)	0.33	1.27 (0.47-3.40)	0.64
Severe mucositis	8 (27.6)	16 (21.6)	0.52	1.04 (0.34-3.22)	0.94
Severe dysphagia	10 (34.5)	28 (37.8)	0.75	0.60 (0.20-1.80)	0.36
Severe dermatitis	5 (17.2)	9 (12.2)	0.53	1.52 (0.40-5.73)	0.54

CI=confidence interval; OR=odds-ratio. *Adjusted on age, BMI, current alcohol consumption and time since surgery

Critères de jugement secondaires

Table 3. Events rates in smokers and non-smokers patients

	Events (%)		P-value	Adjusted-OR (95% CI)	P-value*
	Active Smokers N=29	Non-active Smokers N=74			
Severe acute toxicity	18 (62.1)	38 (51.3)	0.33	1.27 (0.47-3.40)	0.64
Severe mucositis	8 (27.6)	16 (21.6)	0.52	1.04 (0.34-3.22)	0.94
Severe dysphagia	10 (34.5)	28 (37.8)	0.75	0.60 (0.20-1.80)	0.36
Severe dermatitis	5 (17.2)	9 (12.2)	0.53	1.52 (0.40-5.73)	0.54

CI=confidence interval; OR=odds-ratio. *Adjusted on age, BMI, current alcohol consumption and time since surgery

Facteurs associés à la survenue de toxicité(s) aiguë(s)

Table 4. Univariate and multivariate associations with occurrence of at least one severe acute toxicity

	At least one severe acute toxicity N=56	No severe acute toxicity N=47	Univariate analysis	Multivariate analysis	
			P-value	Adjusted OR (95% CI)	P-value
Age, means±SD, years	61.7±9.8	64.6±7.5	0.11	NS	NS
BMI, means±SD, kg/m²	23.7±5.8	25.6±4.3	0.06	NS	NS
Malnutrition¹	11 (19.6)	4 (8.5)	0.11	NS	NS
Sex			0.76	-	-
Women	14 (25.0)	13 (27.7)			
Men	42 (75.0)	34 (72.3)			
Performance status			0.09	NS	NS
0	13 (23.2)	20 (42.6)			
1	37 (66.1)	23 (48.9)			
2	6 (10.7)	3 (6.4)			
3	0 (0.0)	1 (2.1)		-	-
Smoking status			0.33	-	-
Non-active smokers	38 (67.9)	36 (76.6)			
Active smokers	18 (32.1)	11 (23.4)			
Alcohol status			0.51	-	-
Never drinkers/former drinkers	38 (67.9)	29 (61.7)			
Current drinkers	18 (32.1)	18 (38.3)			
Metformin taking	6 (10.7)	6 (12.8)	0.75	-	-
cT			0.04	NS	NS
T1	3 (5.4)	7 (14.9)			
T2	8 (14.3)	15 (31.9)			
T3	19 (33.9)	9 (19.1)			
T4	22 (39.3)	15 (31.9)			
Tx	4 (7.1)	1 (2.1)			
Stage			0.45	-	-
I/II	13 (23.2)	14 (29.8)			
III/IV	43 (76.8)	33 (70.2)			
Cancer localization			0.62	-	-
Oropharynx/larynx/oral cavity	43 (76.8)	38 (80.9)			
Others ²	13 (23.2)	9 (19.1)			
Surgery	24 (42.9)	29 (61.7)	0.07	NS	NS
Concurrent chemotherapy³	49 (87.5)	31 (66.0)	0.009	4.0 (1.4-11.7)	0.01
Fractionation schedule			0.03		0.03
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2.12 Gy by fraction	36 (64.3)	20 (42.6)		2.4 (1.1-5.6)	
OAR doses					
V20 oral cavity, means±SD, %	87.5±17.6	78.1±26.5	0.04	NS	NS
V30 oral cavity, means±SD, %	73.9±28.6	61.1±31.9	0.06	NS	NS

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Sex			0.76	-	-
Women	14 (25.0)	13 (27.7)			
Performance status			0.09	NS	NS
0	13 (23.2)	20 (42.6)			
1	37 (66.1)	23 (48.9)			
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Introduction

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Résultats

Discussion

Conclusion

Discussion

Données de la littérature

- ❑ Association entre **tabagisme actif et mucites et dermites “sévères”** (p=0.03 et p<0.05)

Porock D et al. (2004)¹

- ❑ Etude prospective (n = 53)
- ❑ Grade 2 considéré sévère
- ❑ Une seule évaluation à S5

- ❑ Association entre **tabagisme actif et durée de la mucite** (p=0.014)

Rugg T et al. (1990)²

- ❑ Etude rétrospective (n = 41)

¹Porock D, Nikoletti S, Cameron F. The relationship between factors that impair wound healing and the severity of acute radiation skin and mucosal toxicities in head and neck cancer. *Cancer Nurs.* 2004 Feb;27(1):71–8.

²Rugg T, Saunders MI, Dische S. Smoking and mucosal reactions to radiotherapy. *Br J Radiol.* 1990 Jul;63(751):554–6.

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Méta-analyse ne retrouvant **pas d'association** entre le **tabagisme actif** et la survenue de **toxicité(s) aiguë(s)**

J. Smith et al. / Radiotherapy and Oncology 135 (2019) 51–57

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Smith J et al. (2019)¹

Table 3

Acute and late toxicities for ceased and continuing smokers.

First Author (Year)	Outcome Measured	Acute Toxicity Rate Ceased Smokers (%)	Acute Toxicity Rate Continuing Smokers (%)	p value
<i>Acute Toxicities</i>				
Rugg (1990) [33]	Mucositis [*]	13.6wks	23.4wks	0.014
Zevallos (2009) [35]	Skin ≥ Grade II	43.2	31.8	0.29
	Mucositis ≥ Grade II	56.8	72.7	0.13
Chen (2011) [7]	≥Grade III	60	55	0.74
Meyer (2012) [36]	≥Grade III	22.3	24.1	0.65
Szeszko (2015) [37]	Mucositis ≥ Grade III	42	46	0.71
<i>Late Toxicities</i>				
Van der Voet (1998) [34]	10 yr Laryngeal Complications	14	28	NR
Chen (2011) [7]	≥Grade III	31	49	0.01
Meyer (2012) [36]	≥Grade III	3.5	4.5	0.61
<i>Specific Late Toxicities – ORN/CRN</i>				
Katsura (2008) [27]	ORN	3.8	38.5	0.011
Zevallos (2009) [35]	ORN	2.7	20.5	0.02
Chen (2011) [7]	ORN	4	5	NR
Raguse (2016) [38]	ORN	22.9	30.2	0.051
Sathasivam (2017) [40]	ORN	11	35.1	<0.001
Gessert (2017) [39]	CRN ^{**}	1.2	5.7	0.067

NR – Not recorded.

^{*} Reported as weeks to resolution of mucositis.

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¹ Smith J, Nastasi D, Tso R, Vangaveti V, Renison B, Chilkuri M. The effects of continued smoking in head and neck cancer patients treated with radiotherapy: A systematic review and meta-analysis. *Radiother Oncol.* 2019;135:51–7.

Données de la littérature

Méta-analyse ne retrouvant **pas d'association** entre le **tabagisme actif** et la survenue de **toxicité(s) aiguë(s)**

J. Smith et al. / Radiotherapy and Oncology 135 (2019) 51–57

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Smith J et al. (2019)¹

Table 3

Acute and late toxicities for ceased and continuing smokers.

First Author (Year)	Outcome Measured	Acute Toxicity Rate Ceased Smokers (%)	Acute Toxicity Rate Continuing Smokers (%)	p value
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Rugg (1990) [33]	Mucositis	13.6wks	23.4wks	0.014
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☐ Ostéoradionécrose

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Données de la littérature

Méta-analyse ne retrouvant pas d'association entre le tabagisme actif et la survenue de toxicité(s) aiguë(s)

Smith J et al. (2019)¹

- Ostéoradionécrose
- Survie globale**

Table 1
Overall survival (OS) data from included studies.

First Author (Year)	Follow-Up Period (Years)	OS Ceased Smokers (%)	OS Continuing Smokers (%)	p value
<i>Studies Included in Meta-Analysis</i>				
Browman (1993) [15]	2	66	39	0.005
Browman (2002) [16]	2	Light – 63.4	Heavy – 54.8	NR
Chen (2011) [7]	5	55	23	<0.001
Al-Mamgani (2013) [17]	10	68	33	<0.001
Platek (2016) [29]	5	70.7	32.1	NR
<i>Studies not in Meta-Analysis</i>				
Gillison (2012) [30]	9.3 [*]	HR – 2.19		<0.01
Choi (2016) [41]	4.5 [*]	HR ^{**} – 2.71 (Continuing), 2.38 (Ceased), 1.68 (Former)		All < 0.05
Descamps (2016) [32]	2 [*]	HR – 1.51		0.03

NR – Not recorded.

^{*} Reported as median follow-up.

^{**} Hazard ratios were reported in comparison to never smokers.

Table 2
Locoregional control (LRC) data from included studies.

First Author (Year)	Follow-Up Period (Years)	LRC Ceased Smokers (%)	LRC Continuing Smokers (%)	p value
<i>Studies Included in Meta-Analysis</i>				
Terhaard (1991) [18]	3	96	85	<0.05
Benninger (1994) [19]	6.2 [*]	89.1	58.8	0.012
Colasanto (2004) [20]	16.6 [*]	91	90	0.30
Sjogren (2009) [22]	5	89	81	0.12
Chen (2011) [7]	5	69	58	0.03
Al-Mamgani (2013) [17]	10	89	66	<0.001
<i>Studies not in Meta-Analysis</i>				
Garden (2013) [31]	5	78	67	0.08
Zackrisson (2015) [28]	5 ^{**}	71.2	57.1	<0.001

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Données de la littérature

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Smith J et al. (2019)¹

- Ostéoradionécrose
- Survie globale
- Contrôle locorégional**

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Limites de l'étude

- ❑ Etude **monocentrique**
- ❑ Evaluation **subjective** de la consommation tabagique
Hald J et al. (2003)¹

¹Hald J, Overgaard J, Grau C. Evaluation of objective measures of smoking status--a prospective clinical study in a group of head and neck cancer patients treated with radiotherapy. *Acta Oncol.* 2003;42(2):154-9.

Introduction

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Points forts de l'étude

- ❑ Etude **prospective**
- ❑ Résultats **concordants** avec la littérature
- ❑ **Evaluation de nos pratiques**

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Conclusion

- ❑ **Pas d'association significative mise en évidence** entre le tabagisme et la survenue d'une toxicité aiguë sévère en cours de Radiothérapie ORL
- ❑ **Chimiothérapie** et **dose par fraction** associées aux toxicités aiguës sévères
- ❑ **Suite** de l'étude : toxicités tardives, contrôle locorégional, survie sans progression et survie globale
- ❑ **Poursuite de la lutte anti-tabac**

Merci pour votre attention

