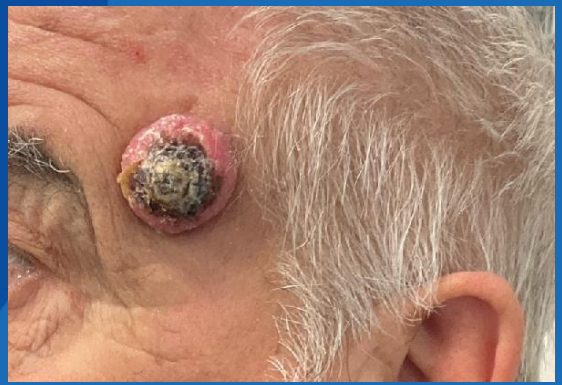
SKIN CANCER: updates in cutaneous SCC

Dr Siobhra O'Sullivan - Radiation Oncologist



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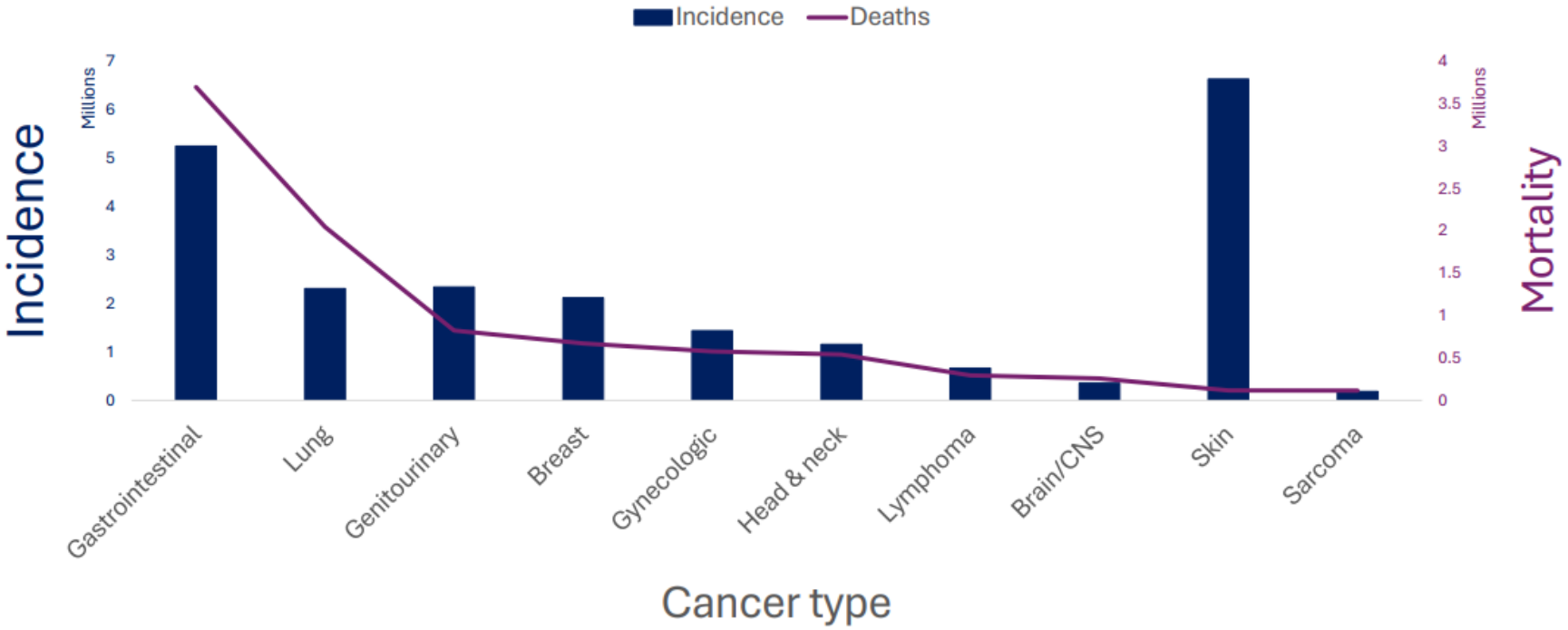
THIS IS MODERN MEDICINE

Global Incidence and Mortality



Global Burden of Disease 2021

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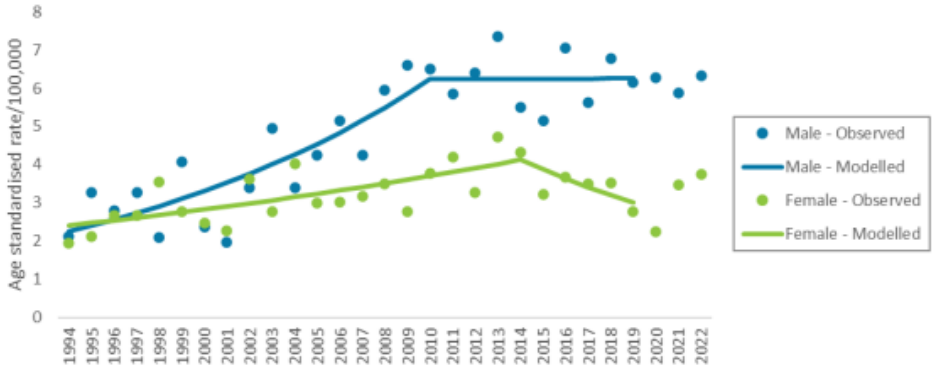
Irish Context

- 11,500 cases of non-melanoma skin cancer per year (SCC and BCC combined)
- Rates expected to double by 2040.

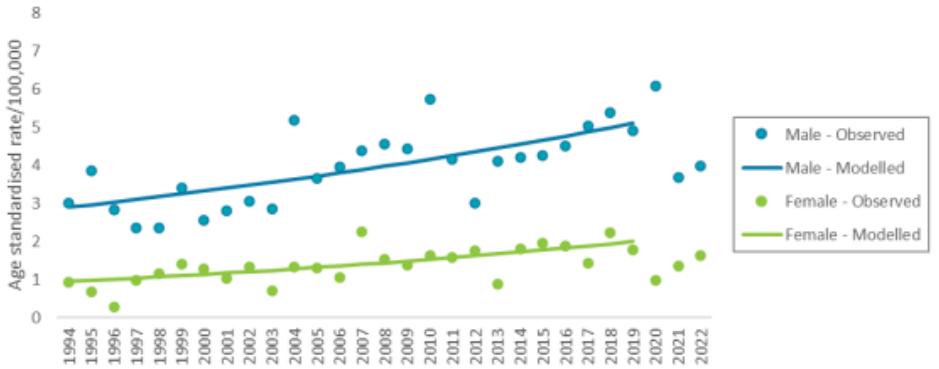
Figure 9. Age-standardised mortality rate for C43 melanoma and C44 NMSC, 1994-2022

C43 melanoma



sex	years	APC (95% CI)	trend	sex	years	APC (95% CI)	trend
Females	1994-2014	2.7 (1.4, 4.1)	↑	Males	1994-2010	6.6 (4.0, 9.2)	↑
	2014-2019	-6.1 (-14.4, 3.0)	↔		2010-2019	0.0 (-3.8, 4.0)	↔

C44 NMSC



sex	years	APC (95% CI)	trend	sex	years	APC (95% CI)	trend
Females	1994-2019	3 (1.6, 4.5)	↑	Males	1994-2019	2.3 (1.3, 3.3)	↑

What we will cover today

Case 1: Early stage SCC – treatment options

Case 2: High risk SCC

- features
- adjuvant treatments: radiotherapy and immunotherapy
- emerging biomarker to predict recurrence and metastatic risk

Case 3: unresectable SCC

- treatment options

Case 1: Early stage cSCC

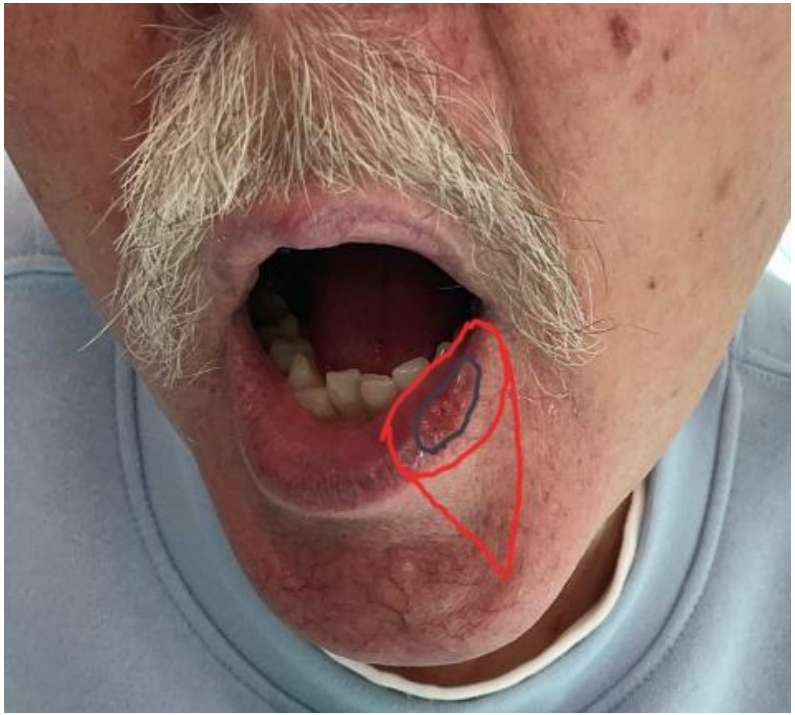
75yo

cT1 SCC lower lip

Never smoker

Surgical option: resection with margin, resulting in loss 1/3 lip

Other options?



Case 1: Early stage cSCC – treatment options

Surgery

Often first line option

Efficient and highly effective

Consider cosmetic and functional outcomes

Consider co-morbidities and patient preference

Radiotherapy

Alternative to surgery

Daily treatments, 5 to 30 visits depending on lesion size/location/age

Cosmetically sensitive location

Surgery fatigue

Older / co-morbidities

Radiotherapy modalities

Surface radiotherapy
Kilovoltage energies
Superficial lesions
Quick set-up and treatment

External beam radiotherapy
Megavoltage energies
Deep seated lesions or complex targets (eg nodes)
Longer set-up and treatment

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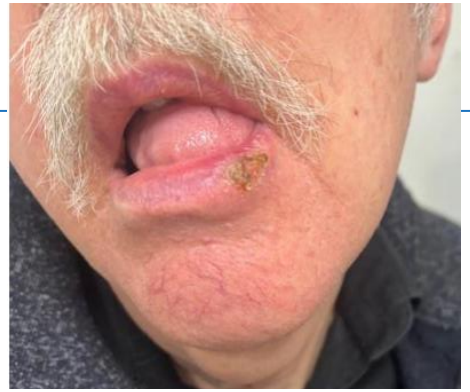
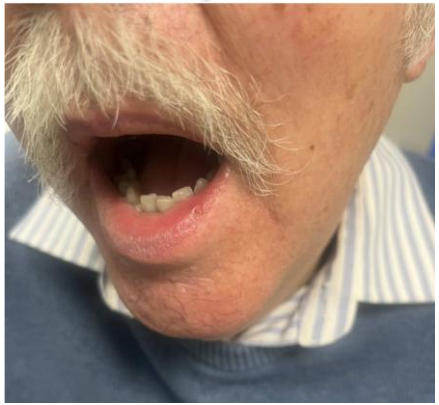
Case 1: Early stage cSCC

Surface RT

51Gy in 17 fractions



End of treatment



1st f/up at 6 weeks

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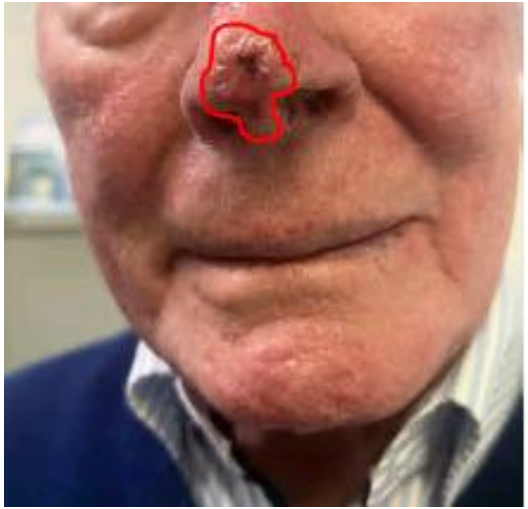
Radiotherapy before and after

87yo, nasal tip lesion
history of lung cancer



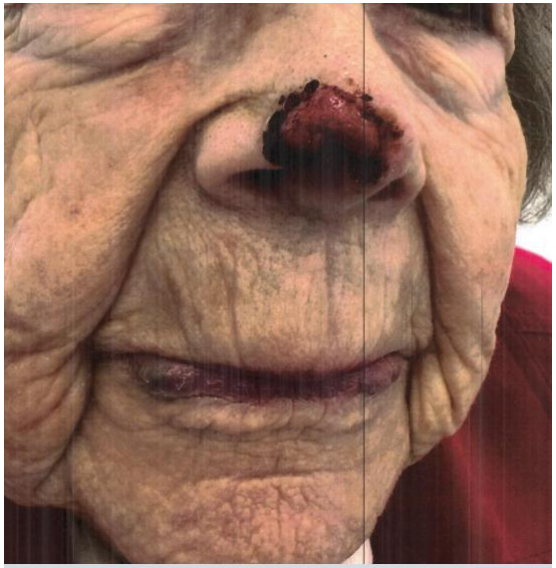
Before

Final treatment

6 week follow up

Radiotherapy before and after

97yo, NH, wheelchair.
Nasal tip lesion, opted for observation yrs previously
Now bleeding, pain, itch, cartilage invasion



Before

4 week follow up

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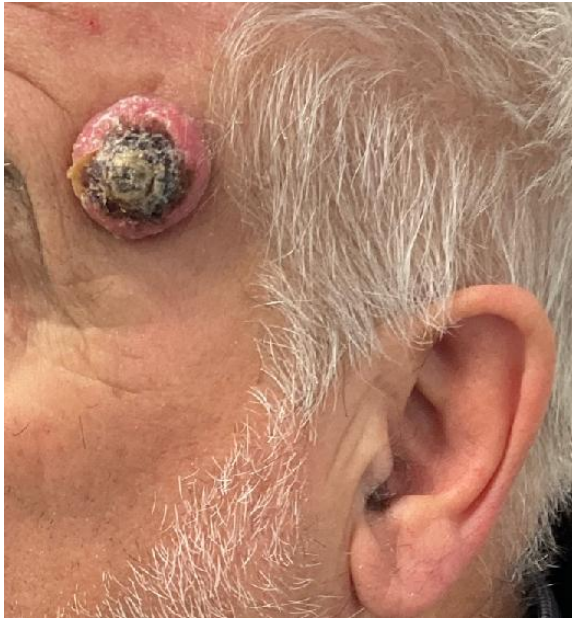
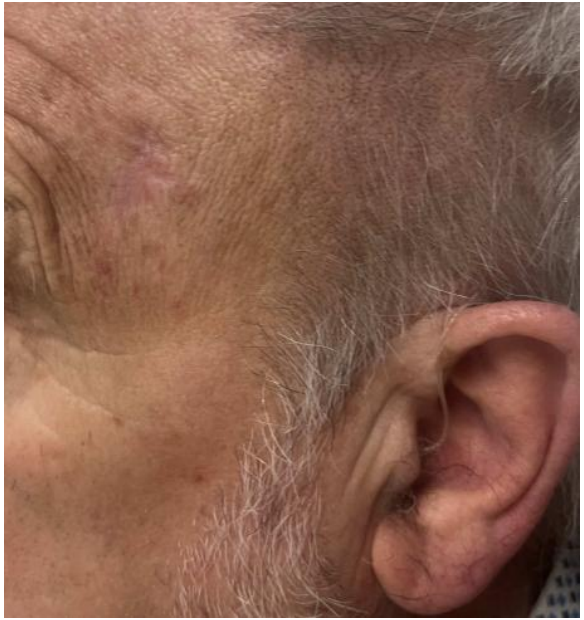
Radiotherapy before and after

77yo, lesion L temple.

Declined surgery (flap)



Before



9 week follow up

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Case 2

High risk cSCC

Case 2: high risk cSCC

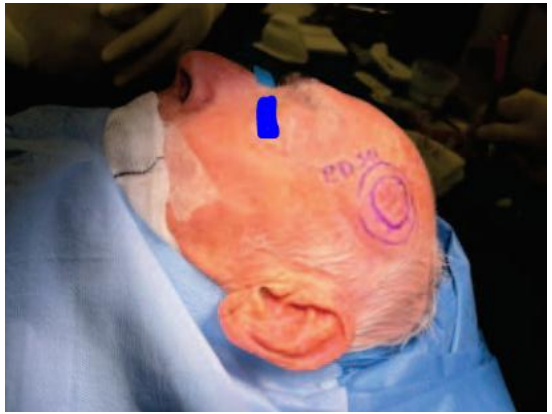
88yo

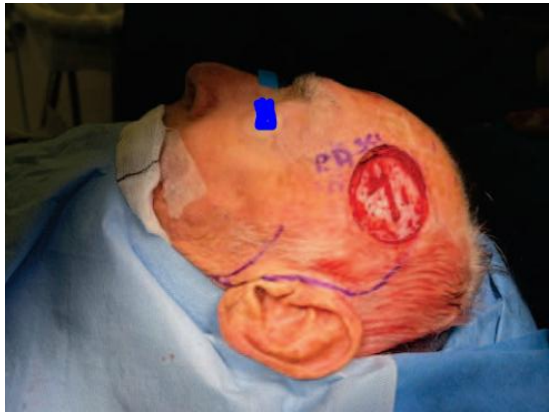
Rapidly growing lesion L temple

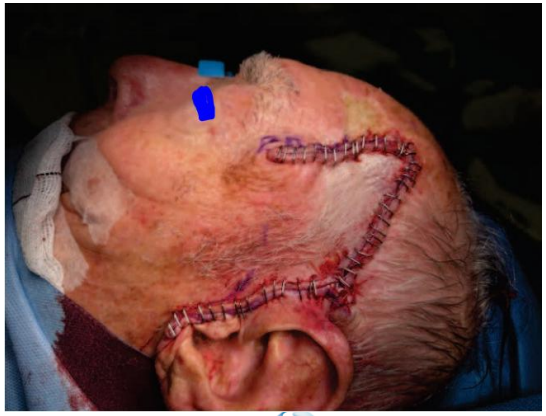
WLE left temple lesion

BGHx: AF (on Eliquis), BPH, lower limb periph neuropathy

Social: main carer for his wife







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Case 2: high risk cSCC

Pathology:

- pT3 poorly differentiated SCC

- **30mm diam**, **7mm DOI** extending through subcut fat and **into skeletal muscle**
- No PNI, no LVI
- Periph margin 8mm, **deep margin 0.5mm**

CT staging: no nodes, no mets

Case 2: high risk cSCC

Adjuvant Radiotherapy reduces local, regional and metastatic recurrence

Adjuvant Immunotherapy with **Cemiplimab** (after surgery and radiotherapy) significantly improves DFS (Phase 3 results)

Both declined by patient

What is high risk cSCC?

Increased risk of local recurrence, lymph node metastasis, and distant metastasis

Clinical features

Rapid growth

Diam >2cm (esp >4cm)

Poorly defined borders

Location (ear/temple/mask area/genitalia)

Recurrent lesion

Neurologic symptoms

Chronic Immunosuppression

Pathologic features

Poorly differentiated

Desmoplastic, adenosquamous or sarcomatoid subtype

DOI >6mm or beyond subcut fat

Perineural involvement >0.1mm; or named nerve involvement

Lymphovascular space involvement

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Biomarker?

High risk SCC - biomarker

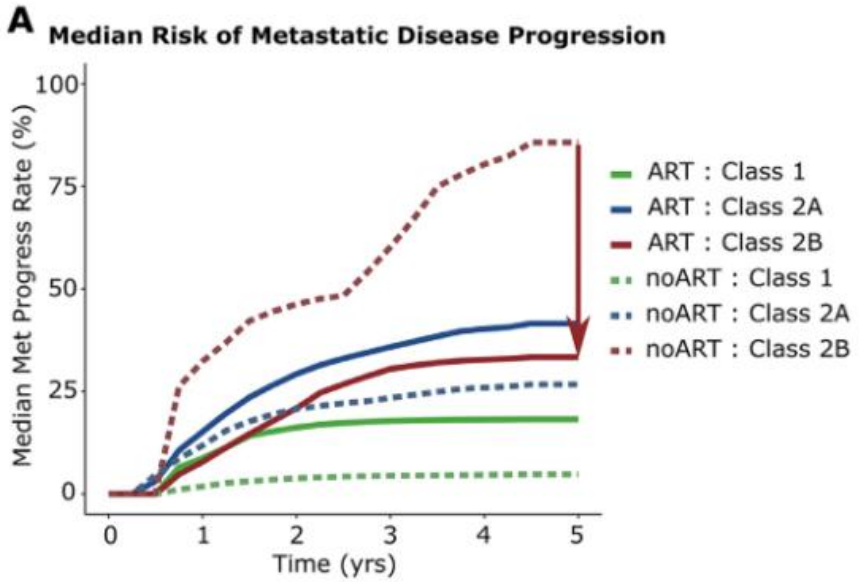
DecisionDx-SCC novel biomarker for predicting metastasis risk

May prognosticate for adj RT benefit

Could be used as additional risk stratification tool in addition to clinicopath features

But…Needs prospective validation through RCT

Not yet available outside US



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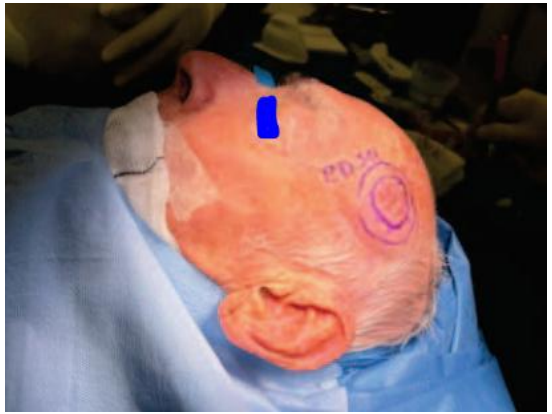
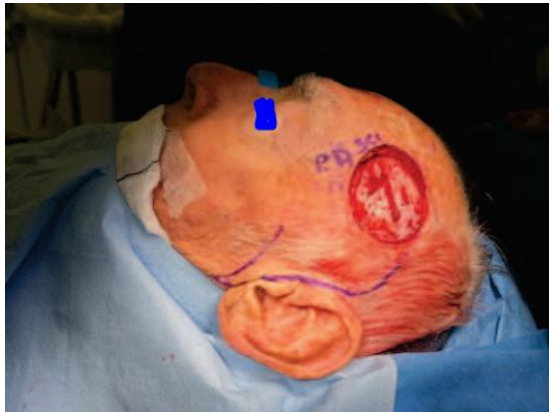
Case 2: high risk SCC

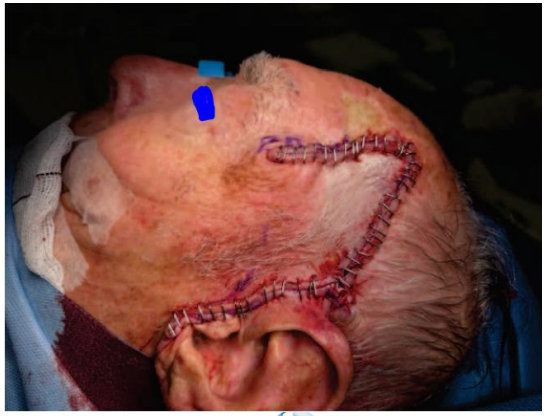
88yo

Rapidly growing lesion L temple

WLE T3 poorly diff, deep margin 0.5mm. No adj treatment.







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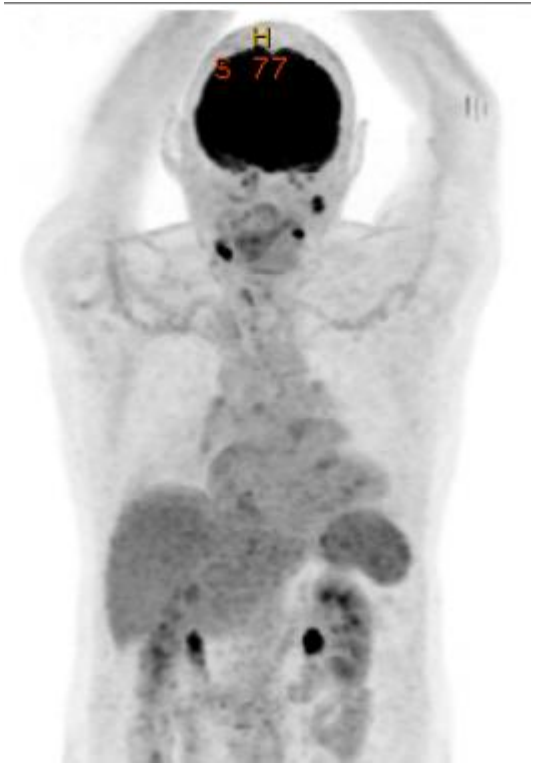
Case 3: high risk SCC – 6 months later



Nodal recurrence – left parotid and bilat neck.

Remains curable.

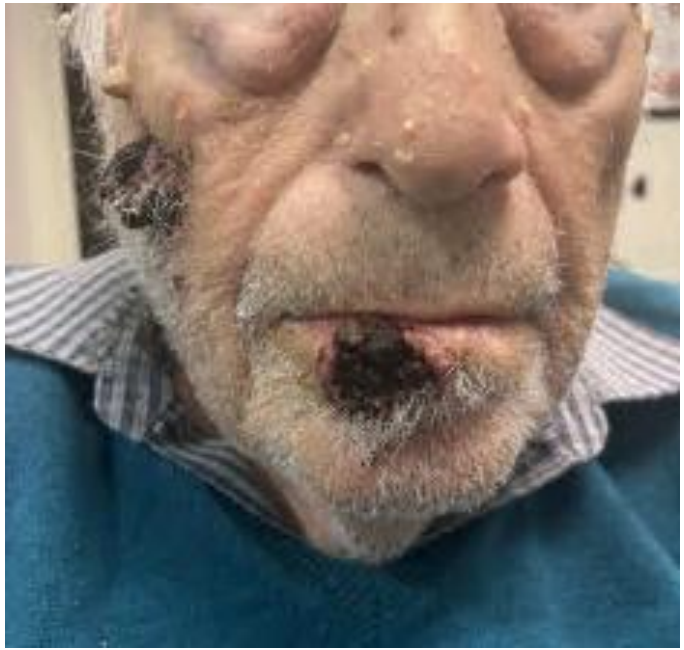
Salvage treatment options:

- Standard of care: surgery and adjuvant radiotherapy
- Emerging: neo-adjuvant immunotherapy

Next: Unresectable disease

Case 3: multiple unresectable cSCCs

88yo, NH resident
Radiotherapy to 2 facial SCCs – lip and cheek



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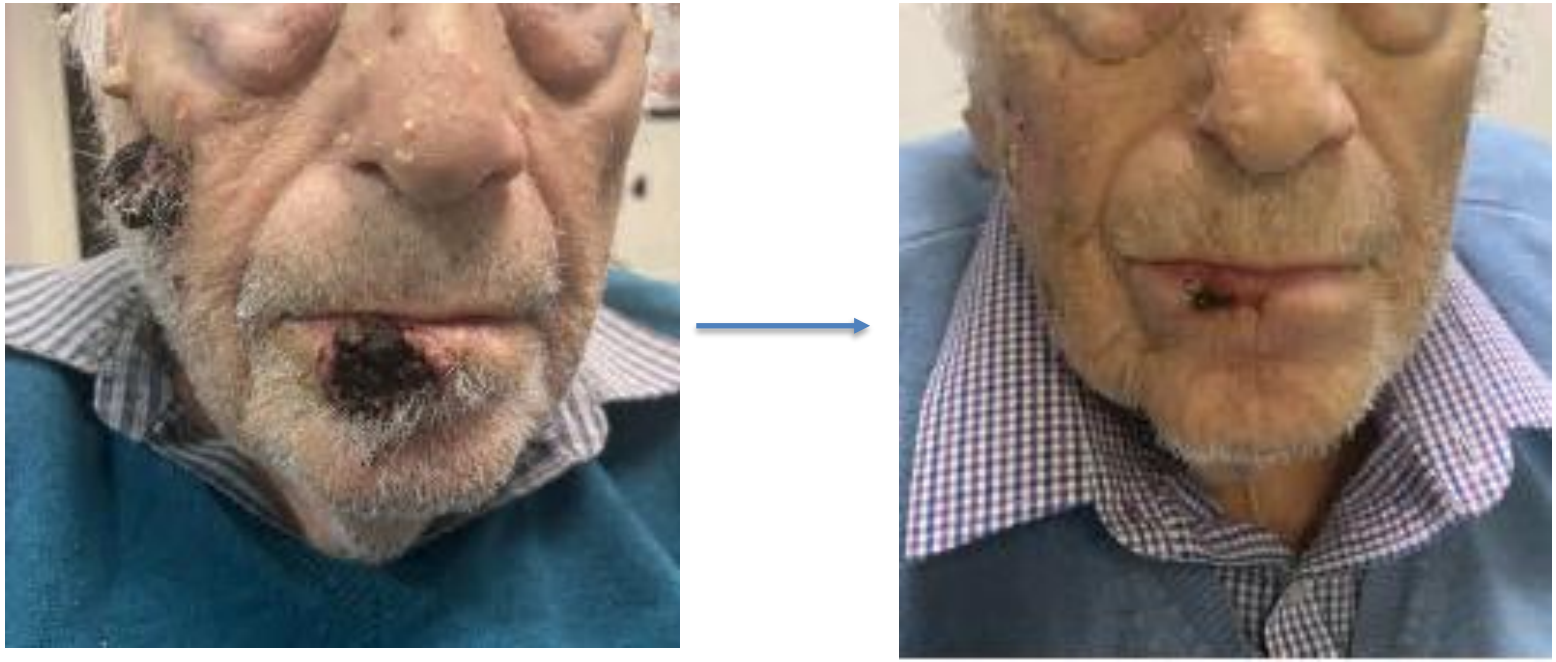
Case 3: multiple unresectable cSCCs

88yo, NH resident
Radiotherapy to 2 facial SCCs – lip and cheek



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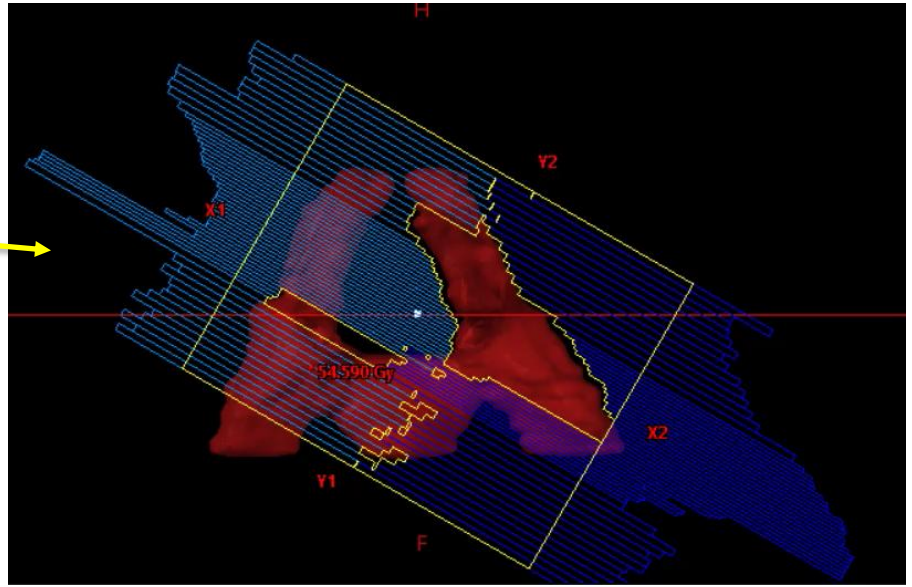
Radiotherapy: modern delivery/complex treatments



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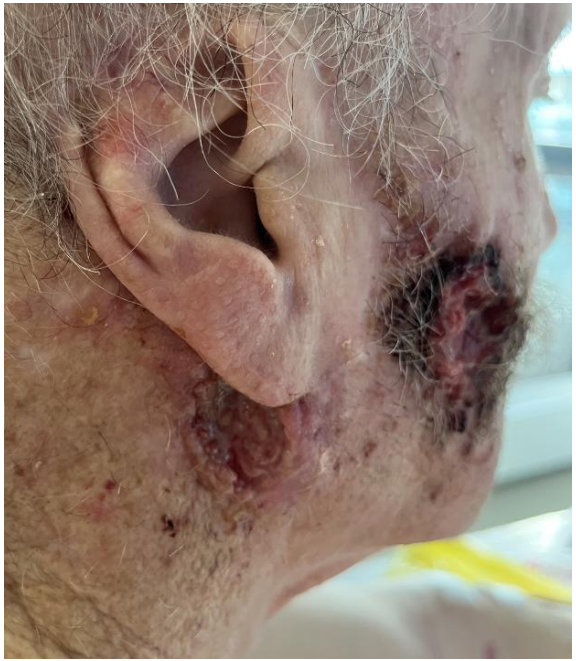
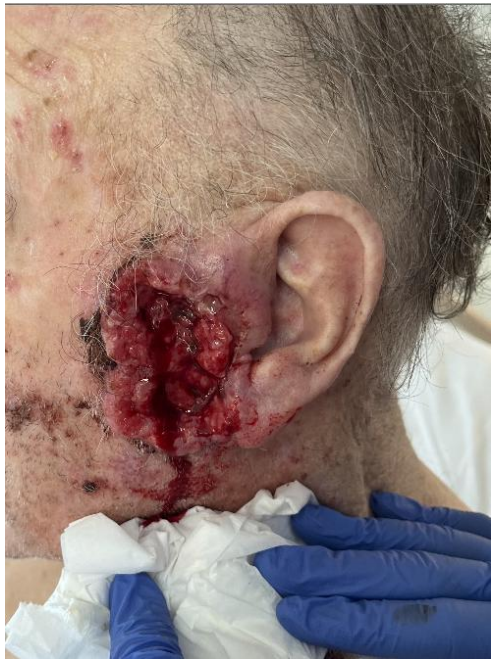
Case 4: multiple unresectable cSCCs

74yo

Hx UV sun exposure. C2H5 dependence.

Multiple cSCCs, bilat neck nodes, and borderline mediastinal nodes





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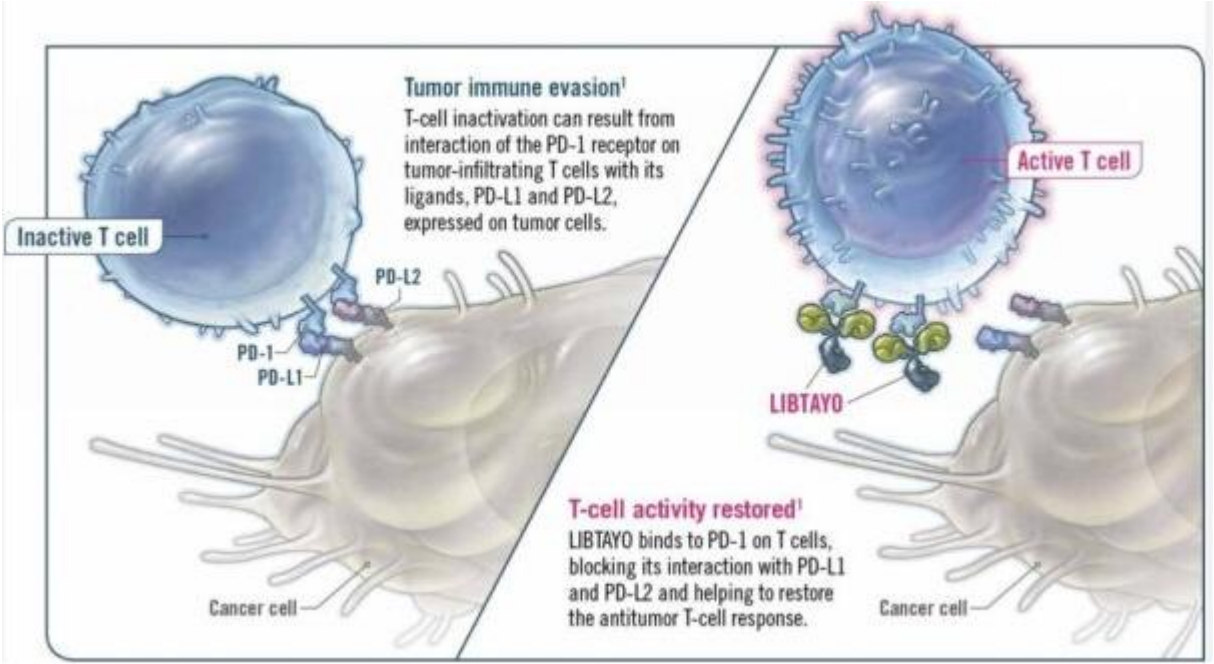
Case 4: multiple unresectable cSCCs

Treated with Cemiplimab

iv every 3 weeks



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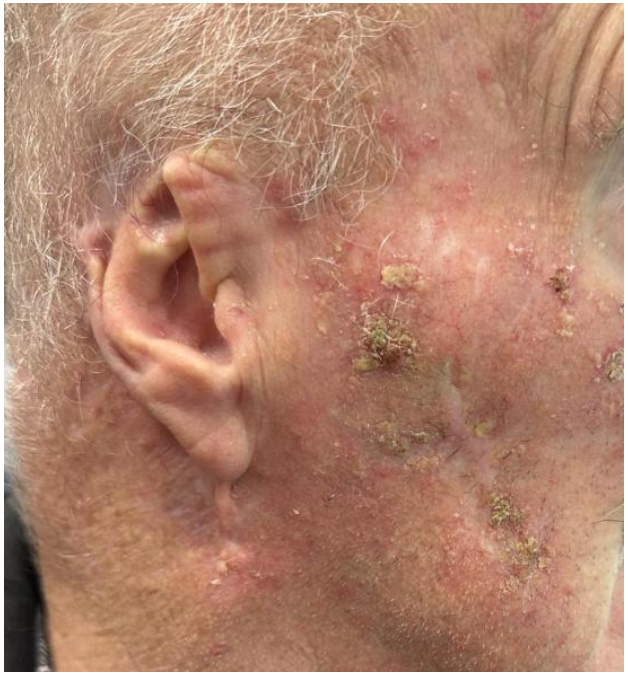
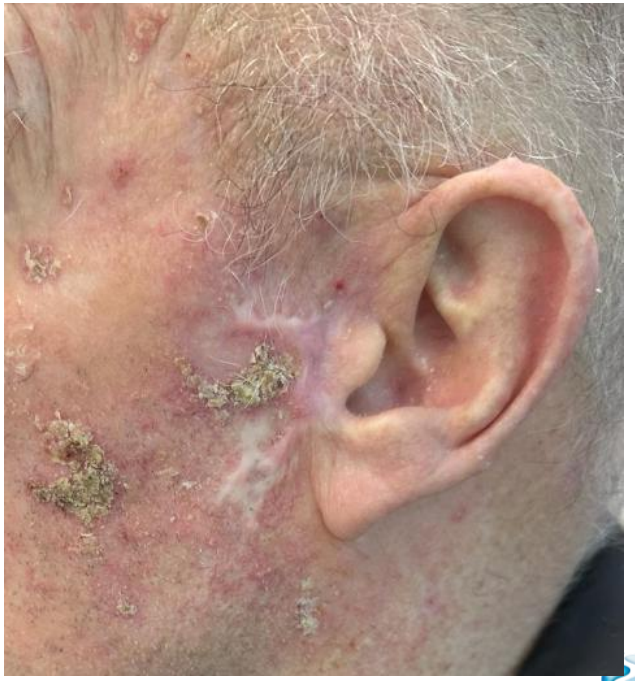
Case 4: multiple unresectable cSCCs

Cemiplimab response





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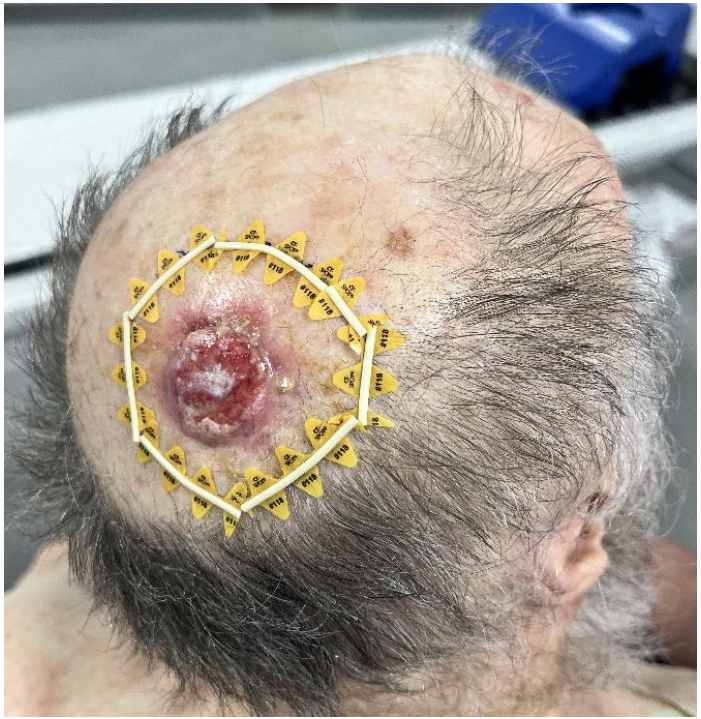
Case 3: multiple unresectable cSCC

Salvage RT to recurrent scalp lesion



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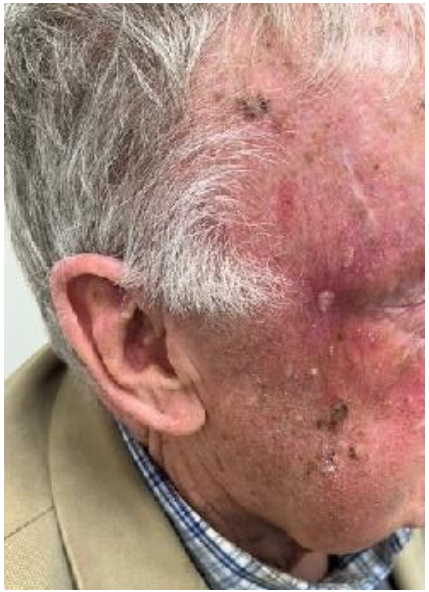
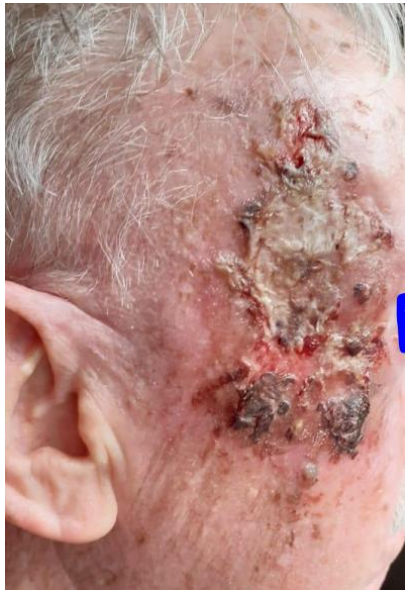
Radiotherapy skin toxicity mgt

Skin care



Final RT

Using topical emollients



One week later

Moist desquamation

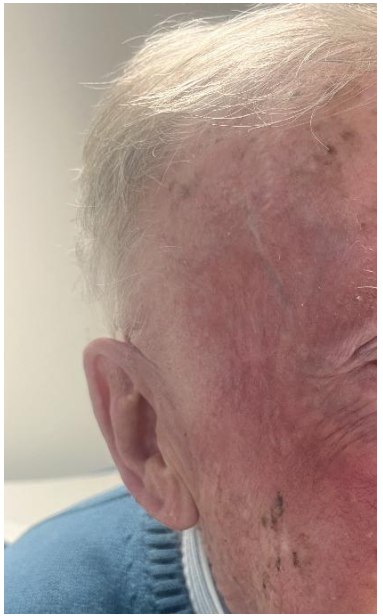
Management:

Avoid further trauma/friction

Bidaily saline soaks

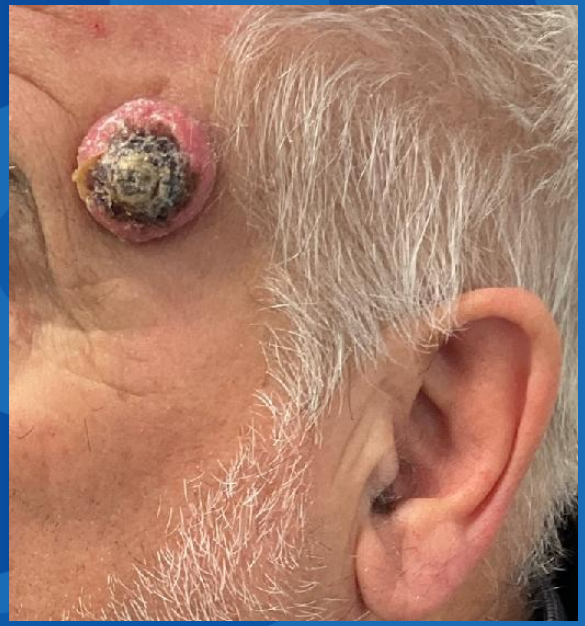
Strata XRT crème (Irish trial ready to start)

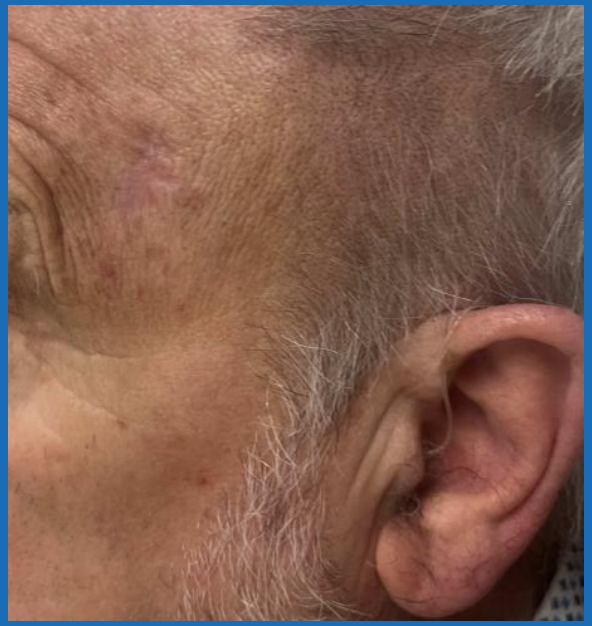
No dressings (could use allevyn if needed)



Two weeks later

Thank you





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Thank you

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