Candidate Information

Patient Record Summary

• Name: Sandra Potter

Age: 63 years

• **Gender:** Female

• Indigenous Status: Not Aboriginal or Torres Strait Islander

• Allergies and Adverse Reactions: Nil known

Medications:

- Atorvastatin 20 mg daily (for hyperlipidaemia)
- Lisinopril 10 mg daily (for hypertension)
- o Vitamin D supplements

Past History:

- Hypertension, diagnosed 8 years ago.
- o Hyperlipidaemia, diagnosed 5 years ago.
- o No previous history of skin cancer.

Social History:

- o Retired school teacher, enjoys gardening.
- o Non-smoker, occasional glass of wine with dinner.
- Lives with her partner.

Family History:

Mother: Deceased from stroke at age 70.

o Father: Skin cancer (BCC), diagnosed in his 60s.

Vaccination and Preventative Activities:

- o Up to date with all routine vaccinations.
- o Regular skin checks due to family history of skin cancer.

Scenario

Sandra Potter, a 63-year-old woman, presents to your clinic for removal of a **suspected squamous cell carcinoma (SCC)** on her lower leg (just above the ankle). The lesion has been slowly growing over the past few months, and a biopsy performed two weeks ago confirmed it as **premalignant**, consistent with SCC in situ.

Sandra is scheduled for a **minor excision procedure** to remove the lesion. However, she expresses concerns about the risk of **infection** after the procedure, particularly since she enjoys gardening and is often outdoors. She also mentions that she has heard infections can be more common in older patients. She wants to know how likely an infection is and what can be done to prevent it.

Clinical Examination Findings

• General Appearance: Healthy, well-groomed, no signs of distress.

Vital Signs:

BP: 135/85 mmHg

o HR: 72 bpm, regular

Temp: 36.7°C

o RR: 14/min

o SpO2: 98% on room air

• Skin Examination:

- 1.5 cm lesion above the right ankle, firm, slightly raised, with scaly surface.
- o No surrounding erythema or signs of infection.
- No regional lymphadenopathy.
- **Vascular Examination:** Peripheral pulses normal, no evidence of venous insufficiency or peripheral arterial disease.

Histology Report

Biopsy Results:

- Lesion Type: Squamous cell carcinoma in situ (Bowen's disease).
- Margins: Involved at the biopsy site.

o **Expected Histology for Excision:** Premalignant.

Table 1. Patient and excision characteristics								
Characteristic	Overall (n=3819)	No SSI (n=3521)	SSI (n=298)	SSI rate (%)	<i>P</i> -value			
Age (IQR), range (n=3794)	63 (50, 73), range 5 to 101	62 (49, 73); range 5 to 101	68 (58, 75); range 15 to 91	-	<0.001			
Age >55 years	2548	2305	243	9.5	<0.001			
Male (%)	2095 (54.9)	1912 (54.3)	183 (61.4)	8.7	0.018			
Medical conditions (%)								
Any condition	520 (13.6)	462 (13.1)	58 (19.5)	10.6	0.002			
Anaemia ⁴ (n=478)	1 (0)	1 (0)	O (O)	0.0	1.0			
Cancer ^{1,3,4} (n=2572)	50 (1.9)	39 (1.6)	11 (5.3)	22.0	<0.001			
COPD (n=3752)	62 (1.6)	53 (1.5)	9 (3.0)	14.5	0.047			
Diabetes (n=3818)	285 (7.5)	252 (7.2)	33 (11.1)	11.6	0.014			
Hypertension⁴ (n=478)	119 (24.9)	113 (26.0)	6 (14.0)	5.0	0.082			
Ischaemic heart disease ^{3,4} (n=1663)	45 (2.7)	39 (2.6)	6 (4.0)	13.0	0.306			
Inflammatory skin disease¹ (n=909)	2 (0.2)	2 (0.2)	O (O)	0.0	1.0			
Peripheral vascular disease	19 (0.5)	18 (0.5)	1 (0.3)	5.3	1.0			
Medications (%)								
Any medication	602 (15.8)	538 (15.3)	64 (21.5)	10.6	0.005			
Anticoagulants ^{1,3,4} (n=2572)	204 (7.9)	185 (7.8)	19 (9.2)	9.3	0.489			
Antiplatelet	329 (8.6)	292 (8.3)	37 (12.4)	11.3	0.015			
Daily inhaled steroids ^{1,3,4} (n=2570)	66 (2.6)	60 (2.5)	6 (2.9)	9.1	0.754			
Immunosuppressants¹ (n=909)	12 (1.3)	10 (1.2)	2 (3.5)	16.0	0.135			
Opioids¹ (n=909)	8 (0.9)	8 (0.9)	O (O)	0.0	1.0			
Oral steroids ^{1,3,4} (n=2572)	45 (1.7)	39 (1.6)	6 (2.9)	13.3	0.189			
Disease-modifying anti-rheumatic drugs ⁴ (n=478)	2 (0.4)	2 (0.5)	O (O)	0.0	1.0			

Table 1. Patient and excision characteristics (cont'd)								
Characteristic	Overall (n=3819)	No SSI (n=3521)	SSI (n=298)	SSI rate (%)	<i>P</i> -value			
Smoking status (%) ^{1,3,4} (n=2549)					0.250			
Non-smoker	1579 (61.9)	1464 (62.4)	115 (56.7)	7.3				
Ex-smoker	678 (26.6)	615 (26.2)	63 (31.0)	9.3				
Current smoker	292 (11.5)	267 (11.4)	25 (12.3)	8.6				
Histology (%) (n=3818)					<0.001			
Benign	1151 (30.1)	1117 (31.7)	34 (11.4)	2.1				
Premalignant	814 (21.3)	746 (21.2)	68 (22.8)	8.4				
Malignant	1853 (48.5)	1,657 (47.1)	196 (65.8)	10.6				
Site of lesion (%) (n=3794)					<0.001			
Head and neck	894 (23.6)	864 (24.5)	30 (10.1)	3.4				
Upper limbs	1269 (33.4)	1135 (32.2)	134 (45)	10.6				
Torso	667 (17.6)	633 (18)	34 (11.4)	5.1				
Upper leg	437 (11.5)	407 (11.6)	30 (10.1)	6.9				
Below knee	552 (14.5)	482 (13.7)	70 (23.5)	12.7				
Excision characteristics								
Excision length ^{1,3,4} (IQR); range (n=2572)	20 (15, 30); range 1.5 to 100	20 (14, 30); range 1.5 to 100	27 (20, 38); range 6 to 80	-	<0.001			
Excision length >2 cm	2761	2502	259	9.4	<0.001			
Flap (%) (n=3815)	54 (1.4)	39 (1.1)	15 (5.0)	27.8	<0.001			

Description of patient and excision characteristics of 3819 patients undergoing minor skin excision and comparisons between patients with and without SSI. The data combine results from four clinical trials. Not all characteristics were assessed in all trials; the trial number and/or sample sizes are stated for variables with fewer than 3819 valid entries; age (years) are presented as the median. The denominator for 'any' condition or medication mentioned in pooled data combines 'no' and 'missing values' for trials that did not record certain conditions or medications. Superscript numbers adjacent to variables denote which trial the variable was recorded in. No number (-) indicates that the variable was recorded in all four trials. Excision length (mm) is presented as the median.

 $COPD, chronic \ obstructive \ pulmonary \ disease; \ IQR, interquartile \ range; \ SSI, surgical \ site \ infection.$