

# Predicting the Clinical Management of Skin Lesions using Deep Learning

Kumar Abhishek      Jeremy Kawahara      Ghassan Hamarneh

School of Computing Science, Simon Fraser University, Canada  
{kabhishe, jkawahar, hamarneh}@sfu.ca

## **Supplementary Information**

### **Dataset breakdown**

In Supplementary Table 1, we present a detailed breakdown of the seven-point criteria evaluation dataset along with the diagnosis-wise groupings used to train the models, and in Supplementary Table 2, we present a breakdown of the patient metadata, namely the sex of the patient, and the elevation and the location of the lesion.

Supplementary Table 1: Breakdown of the seven-point criteria evaluation dataset by management and diagnosis labels and the training-validation-testing splits used to train the models.

Diagnosis	Count	Abbreviation	Diagnosis	Management		
			Total	CLNC	EXC	NONE
basal cell carcinoma	42	BCC	42	0	42	0
blue nevus	28					
clark nevus	399					
combined nevus	13					
congenital nevus	17	NEV	575	268	278	29
dermal nevus	33					
recurrent nevus	6					
reed or spitz nevus	79					
melanoma	1					
melanoma (in situ)	64					
melanoma (less than 0.76 mm)	102	MEL	252	0	252	0
melanoma (0.76 to 1.5 mm)	53					
melanoma (more than 1.5 mm)	28					
melanoma metastasis	4					
dermatofibroma	20					
lentigo	24					
melanosis	16	MISC	97	24	23	50
miscellaneous	8					
vascular lesion	29					
seborrheic keratosis	45	SK	45	4	10	31
<b>Management Total</b>	-	-	-	296	605	110

Supplementary Table 2: Breakdown of the patient metadata of the seven-point criteria evaluation dataset.

<b>Label</b>	<b>Count</b>	<b>Label</b>	<b>Count</b>
<i>Sex</i>		<i>Location</i>	
Female	522	Abdomen	125
Male	489	Acral	62
<i>Elevation</i>		Back	281
Flat	448	Buttocks	21
Nodular	123	Chest	100
Palpable	440	Genital areas	8
		Head-neck	92
		Lower limbs	200
		Upper limbs	122