

CLASSIFYING IMPLANT-BEARING PATIENTS VIA  
THEIR MEDICAL HISTORIES: A PRE-STUDY ON  
SWEDISH EMRS WITH SEMI-SUPERVISED GAN-  
BERT

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		Labelled training	Labelled test set	Unlabelled	De-labelled	Weighted F1		
						512	64	SVM
1	SVM (baseline)	903	300	n/a	n/a	n/a	n/a	0.78
	BERT	903	300	n/a	n/a	<b>0.97</b>	0.91	n/a
	GAN-BERT	903	300	1784	n/a	n/a	0.90	n/a
<b>Testing both BERT and GAN-BERT on 300 examples</b>								
2	SVM (baseline)	100	300	n/a	n/a	n/a	n/a	0.76
	BERT	100	300	n/a	n/a	0.15	0.31	n/a
	GAN-BERT	100	300	1784	n/a	n/a	0.67	n/a
3	SVM (baseline)	200	300	n/a	n/a	n/a	n/a	0.75
	BERT	200	300	n/a	n/a	0.10	0.33	n/a
	GAN-BERT	200	300	1784	n/a	n/a	<b>0.84</b>	n/a
4	SVM (baseline)	300	300	n/a	n/a	n/a	n/a	0.77
	BERT	300	300	n/a	n/a	<b>0.93</b>	0.85	n/a
	GAN-BERT	300	300	1784	n/a	n/a	0.87	n/a
<b>Testing BERT on 300 examples and GAN-BERT on re-labelled data</b>								
5	<i>SVM (same as 2)</i>	100	300	n/a	n/a	n/a	n/a	0.76
	<i>BERT (same as 2)</i>	100	300	n/a	n/a	0.15	0.31	n/a
	GAN-BERT	100	1103 (re-lab)	n/a	1103	n/a	0.24	n/a
	GAN-BERT	100	1103 (re-lab)	1784	n/a	n/a	0.34	n/a
	GAN-BERT	100	1103 (re-lab)	1784	1103	n/a	0.44	n/a
6	<i>SVM (same as 3)</i>	200	300	n/a	n/a	n/a	n/a	0.75
	<i>BERT (same as 3)</i>	200	300	n/a	n/a	0.10	0.33	n/a
	GAN-BERT	200	1003 (re-lab)	n/a	1003	n/a	0.26	n/a
	GAN-BERT	200	1003 (re-lab)	1784	n/a	n/a	0.37	n/a
	GAN-BERT	200	1003 (re-lab)	1784	1003	n/a	0.55	n/a
7	<i>SVM (same as 4)</i>	300	300	n/a	n/a	n/a	n/a	0.77
	<i>BERT (same as 4)</i>	300	300	n/a	n/a	0.93	0.85	n/a
	GAN-BERT	300	903 (re-lab)	n/a	903	n/a	0.29	n/a
	GAN-BERT	300	903 (re-lab)	1784	n/a	n/a	0.42	n/a
	GAN-BERT	300	903 (re-lab)	1784	903	n/a	0.80	n/a