

**Link to repository:**

**[https://github.com/emgeerthsen/2026\\_PDS\\_Rabbits.git](https://github.com/emgeerthsen/2026_PDS_Rabbits.git)**

***Github nicknames:***

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## **Summary:**

**What have you learned from the article or other papers about this topic? (cancerous lesions detection: medical and IT side)**

**Are all masks fitting well? Do all images have all masks?**

**Have you noticed repeating characteristics of cancerous lesions?**

**Have you noticed something interesting about pen marks? hair?**

**Did you try evaluating your annotations?**

**Did you as a group decide on some kind of guidelines for annotation?**

**What disagreement did you as a group have in terms of annotations?**

***Note: Version history is taken into account - all group members have to have meaningful contributions!***

## SIDRA'S SUMMARY OF ANNOTATIONS

The annotations of the images were done individually by each student to ensure avoiding bias from being influenced by the other annotators' annotations. In this way, we have variations in annotations of each category; pen marks and amount of hair in each image.

To assess the degree of agreement between the annotators, we used Cohen Kappa's score between each two annotators. Since Cohen Kappa's score calculates the degree of agreement between only two annotators, we decided to find the score between all pairs of group members and compare them. That is, we have 10 scores for each category.

By observing the scores, we can see a significant level of agreement in the annotations related to pen marks, such that the score between two pen marks' annotators ranges from 0.75 to 0.97. Meanwhile, the agreement score between two hair annotators is noticeably lower, as it ranges between 0.55 and 0.77. The reason for this is that annotating pen was easier compared to annotating the amount of hair in an image. There was a disagreement about the meaning of the amount of hair among us. In addition, there was a disagreement about whether we should annotate the hair that is at the centre or the diseased part of the skin, which led to great variations in annotating some images. Besides these challenges, hair colour had also an impact on our annotations and bias. On the one hand, since black hair was more obvious to our eyes, images with black hair were annotated to have a big amount of hair. On the other hand, blond or white hair was less obvious to our eyes, leading us to confuse between skin and hair, and thence disagreement about the amount of hair in an image, which means that not only the precision of our annotations has reduced, but also the accuracy of our annotations has decreased. Annotating pen marks had some challenges too. Sometimes a pen mark may have not been noticed by an annotator. In some cases, it was unclear whether a blue mark was a pen mark, a blood vessel or an injury related to the disease, leading to different interpretations of the mark and hence different annotations.