

# Appendix S1.

For the second part of the HS questionnaire, we included 3 items with photographs (items 5, 6, 7) followed by 3 items in accordance with the definition of HS by the HS Foundation (12). The photographs reflected the body area involved in HS: armpit (Q. 5), inguinal creases (Q. 6), bottom (Q. 7). There were 2–4 photographs per item, including different elementary lesions such as abscesses or scars observed in Hurley 1 and 2 patients. The Hurley score is a severity score ranging from 1 to 3 (13). We did not include Hurley 3 score photographs, as it is less common than the other scores (14).

For the second part of the psoriasis questionnaire, we included 3 items with photographs (items 5, 6, 7) followed by 2 items regarding the presence of inverse psoriasis or a possible differential diagnosis (hives or eczema). These items were derived from expert opinion and the National Psoriasis Foundation's survey on psoriasis (8). The pictures reflected the body area involved in psoriasis: elbows, lumbosacral (Q. 5), nails (Q. 6), scalp (Q. 7). There were 1–2 photographs per item, including typical lesions, such as erythematous-squamous patches and punctuate depressions in the nail plate.

For the second part of the vitiligo questionnaire, we included one item with a panel of photographs (Q. 8) and 3 items which focused on typical areas involved in vitiligo and common presentations. The photographs reflected typical symmetrical macules of depigmented skin.

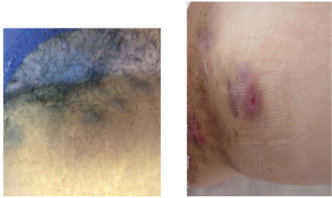
|    | <b>Hidradenitis suppurativa</b>                                                                                                                               | <b>Psoriasis</b>                                                                                                                            | <b>Vitiligo</b>                                                                                                       |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1  | I have a HS                                                                                                                                                   | I have a Psoriasis                                                                                                                          | I have a Vitiligo                                                                                                     |
| 2  | I have a HS & it was diagnosed by a dermatologist                                                                                                             | I have a Psoriasis & it was diagnosed by a dermatologist                                                                                    | I have a Vitiligo & it was diagnosed by a dermatologist                                                               |
| 3  | I have a HS & it was diagnosed by a non-dermatologist practitioner                                                                                            | I have a Psoriasis & it was diagnosed by a non-dermatologist practitioner                                                                   | I have a Vitiligo & it was diagnosed by a non-dermatologist practitioner                                              |
| 4  | I have a HS & I made the diagnosis myself                                                                                                                     | I have a Psoriasis & I made the diagnosis myself                                                                                            | I have a Vitiligo & I made the diagnosis myself                                                                       |
| 5  | I have or have had this kind of eruption in armpits or under the breasts<br> | I have or have had this kind of eruption<br>              | I have lesions of Vitiligo mostly on face, hands and feet                                                             |
| 6  | I have or have had this kind of eruption in inguinal creases<br>            | I have or have had this kind of eruption on my nails<br>  | I have lesions of Vitiligo all over the body and on both sides                                                        |
| 7  | I have or have had this kind of eruption on my bottom<br>                  | I have or have had this kind of eruption on my scalp<br> | I have lesions of Vitiligo on one side of the body                                                                    |
| 8  | I have or have had painful abscesses                                                                                                                          | I have or have had a rash or redness/irritation in armpit / inguinal creases / bottom & lasting more than two weeks at a time               | I have this kind of eruption<br> |
| 9  | These abscesses were located in armpit / inguinal creases / bottom                                                                                            | I have been diagnosed with other skin conditions like eczema or hives                                                                       |                                                                                                                       |
| 10 | These abscesses occurred repeatedly in the same area                                                                                                          |                                                                                                                                             |                                                                                                                       |

Fig. S1. Self reported questionnaires for hidradenitis suppurativa, psoriasis and vitiligo.

**Table SI. Algorithms using combinations of questions from the self reported questionnaire that assigned a diagnosis of HS, psoriasis or vitiligo.**

| Alg. No. | Hidradenitis suppurativa (HS)                                                                                           | Se   | Sp   | ROC              | Psoriasis                                                                                                                                                                              | Se   | Sp   | ROC              | Vitiligo                                                               | Se   | Sp   | ROC              |
|----------|-------------------------------------------------------------------------------------------------------------------------|------|------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------------|------------------------------------------------------------------------|------|------|------------------|
| 1        | I have HS                                                                                                               | 93.3 | 96.8 | 0.95 (0.9–0.99)  | I have psoriasis                                                                                                                                                                       | 82.2 | 98.6 | 0.90 (0.87–0.94) | I have vitiligo                                                        | 77.8 | 100  | 0.89 (0.84–0.94) |
| 2        | I have HS & it was diagnosed by a dermatologist                                                                         | 92.3 | 96.7 | 0.94 (0.89–1)    | I have psoriasis & it was diagnosed by a dermatologist                                                                                                                                 | 85.7 | 97.5 | 0.92 (0.88–0.95) | I have vitiligo & it was diagnosed by a dermatologist                  | 80.3 | 100  | 0.90 (0.85–0.95) |
| 3        | I have HS & it was diagnosed by a non-dermatologist practitioner                                                        | 93.3 | 94   | 0.94 (0.87–1)    | I have psoriasis & it was diagnosed by a non-dermatologist practitioner                                                                                                                | 78.8 | 87.3 | 0.83 (0.76–0.9)  | I have vitiligo & it was diagnosed by a non-dermatologist practitioner | 66.7 | 91.7 | 0.79 (0.63–0.96) |
| 4        | I have HS & it was diagnosed by a doctor                                                                                | 93.3 | 94   | 0.94 (0.87–1)    | I have psoriasis & it was diagnosed by a doctor                                                                                                                                        | 82.8 | 98.4 | 0.91 (0.87–0.94) | I have vitiligo & it was diagnosed by a doctor                         | 77.8 | 100  | 0.89 (0.83–0.94) |
| 5        | I have HS & I made the diagnosis myself                                                                                 | 85.7 | 92.5 | 0.89 (0.75–1)    | I have psoriasis & I made the diagnosis myself                                                                                                                                         | 60   | 84.9 | 0.72 (0.61–0.84) | I have vitiligo & I made the diagnosis myself                          | 75   | 93.3 | 0.84 (0.74–0.94) |
| 6        | Photographs of typical lesions in armpit OR inguinal creases OR bottom                                                  | 56.3 | 98.9 | 0.94 (0.89–0.99) | Photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp                                                                                                            | 73.5 | 96.7 | 0.85 (0.81–0.89) | Photographs of typical lesions (face/hands/trunk)                      | 69.4 | 95.3 | 0.82 (0.75–0.90) |
| 7        | I have HS & photographs of typical lesions in armpit OR inguinal creases OR bottom                                      | 92.9 | 96.2 | 0.94 (0.89–0.99) | I have psoriasis & photographs of typical lesions on elbows/lumbosacral area OR scalp                                                                                                  | 75   | 96.7 | 0.85 (0.81–0.89) | I have vitiligo & photographs of typical lesions (face/hands/trunk)    | 78.1 | 95.2 | 0.87 (0.79–0.94) |
| 8        | I had painful abscesses lesions & in armpit/inguinal creases/bottom & occurring repeatedly in the same area             | 66.7 | 97.3 | 0.82 (0.75–0.89) | Photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp OR I had lesions of armpit/groin crease, between buttocks or under breasts for more than 2 weeks           | 68.1 | 97.1 | 0.83 (0.78–0.87) |                                                                        |      |      |                  |
| 9        | I have HS & I had painful abscesses lesions & in armpit/inguinal creases/bottom & occurring repeatedly in the same area | 95.8 | 95.7 | 0.96 (0.92–1)    | I have psoriasis & photographs of typical lesions on elbows/lumbosacral area OR scalp OR I had lesions of armpit/groin crease, between buttocks or under breasts for more than 2 weeks | 87.2 | 96.9 | 0.92 (0.88–0.96) |                                                                        |      |      |                  |
| 10       | I had lesions in armpit/inguinal creases/bottom & occurring repeatedly in the same area                                 | 61.1 | 97.5 | 0.79 (0.73–0.86) |                                                                                                                                                                                        |      |      |                  |                                                                        |      |      |                  |
| 11       | I have HS & I had lesions in armpit/inguinal creases/bottom & occurring repeatedly in the same area                     | 92   | 95.6 | 0.94 (0.88–0.99) |                                                                                                                                                                                        |      |      |                  |                                                                        |      |      |                  |

ROC: receiver operating characteristic; Se: sensitivity; Sp: specificity.

**Table SII. Metrological characteristics of all the algorithms used to define hidradenitis suppurativa, psoriasis and vitiligo**

| Item no. | Hidradenitis suppurativa                                                                                                | Questions          | Psoriasis                                                                                                                                                                                       | Questions               | Vitiligo                                                               | Questions    |
|----------|-------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------|--------------|
| 1        | I have HS                                                                                                               | 1                  | I have psoriasis                                                                                                                                                                                | 1                       | I have vitiligo                                                        | 1            |
| 2        | I have HS & it was diagnosed by a dermatologist                                                                         | 1 & 2              | I have psoriasis & it was diagnosed by a dermatologist                                                                                                                                          | 1 & 2                   | I have vitiligo & it was diagnosed by a dermatologist                  | 1 & 2        |
| 3        | I have HS & it was diagnosed by a non-dermatologist practitioner                                                        | 1 & 3              | I have psoriasis & it was diagnosed by a non-dermatologist practitioner                                                                                                                         | 1 & 3                   | I have vitiligo & it was diagnosed by a non-dermatologist practitioner | 1 & 3        |
| 4        | I have HS & it was diagnosed by a doctor                                                                                | 1 & (2 or 3)       | I have psoriasis & it was diagnosed by a doctor                                                                                                                                                 | 1 & (2 or 3)            | I have vitiligo & it was diagnosed by a doctor                         | 1 & (2 or 3) |
| 5        | I have HS & I made the diagnosis myself                                                                                 | 1 & 4              | I have psoriasis & I made the diagnosis myself                                                                                                                                                  | 1 & 4                   | I have vitiligo & I made the diagnosis myself                          | 1 & 4        |
| 6        | Photographs of typical lesions in armpit OR inguinal creases OR bottom                                                  | 5 or 6 or 7        | Photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp                                                                                                                     | 5 or 6 or 7             | Photographs of typical lesions (face/hands/trunk)                      | 8            |
| 7        | I have HS & photographs of typical lesions in armpit OR inguinal creases OR bottom                                      | 1 &<br>5 or 6 or 7 | I have psoriasis & photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp                                                                                                  | 1 &<br>5 or 6 or 7      | I have vitiligo & photographs of typical lesions (face/hands/trunk)    | 1 & 8        |
| 8        | I had painful abscesses lesions & in armpit/inguinal creases/bottom & occurring repeatedly in the same area             | 8 & 9 & 10         | Photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp OR I had lesions of armpit/groin crease, between buttocks or under breasts for more than 2 weeks                    | 5 or 6 or 7 or 8        |                                                                        |              |
| 9        | I have HS & I had painful abscesses lesions & in armpit/inguinal creases/bottom & occurring repeatedly in the same area | 1 & 8 & 9 & 10     | I have psoriasis & photographs of typical lesions on elbows/lumbosacral area OR nails OR scalp OR I had lesions of armpit/groin crease, between buttocks or under breasts for more than 2 weeks | 1 &<br>5 or 6 or 7 or 8 |                                                                        |              |
| 10       | I had lesions in armpit/inguinal creases/bottom & occurring repeatedly in the same area                                 | 9 & 10             |                                                                                                                                                                                                 |                         |                                                                        |              |
| 11       | I have HS & I had lesions in armpit/inguinal creases/bottom & occurring repeatedly in the same area                     | 1 & 9 & 10         |                                                                                                                                                                                                 |                         |                                                                        |              |