Supplemental material 4: Economic valuation of inputs and outcomes

1. Economic valuation of inputs

Table 1 Economic valuation of inputs

Proposals	Input (quantity and description)	Breakdown
General	**€0.00** Personal time.	The input from patients (mild psoriasis, moderate psoriasis, severe psoriasis, incident, misdiagnosed and undiagnosed) is, on the one hand, their personal time spent completing the relevant visits or learning about their illness. This is estimated as €0.00, as they are considered the main character in this approach.
General	**€0.00** Working time.	On the other hand, the working time has to be taken into account, i.e. attending visits during business hours (for workers). This investment is considered to be €0.00, given that it does not involve the patient in any economic outlay. However, the return does take into account the labour productivity loss generated.
1	**€80,947.99** Working time to produce a consensus document	▪ Monthly salary of five dermatologists and the cost of attending four meetings (including a day's salary plus travel expenses): [3] €25,760.32** ▪ Monthly salary of five primary care doctors and the cost of attending four meetings (including a day's salary plus travel expenses): [4] €30,704.28** ▪ Daily salary of twenty dermatologists and travel expenses for one meeting: [3] €8,324.74** ▪ Daily salary of twenty primary care doctors and travel expenses to one meeting: [4] €8,906.39** ▪ The final review of the document will incur other costs for the dermatologists and primary care doctors who will undertake the review, calculated from the working time devoted to it: [3,4] €7,192.80 ▪ Salary for a day's working by administrative staff to post the consensus document: [5] €59.46 ** The travel expenses are estimated based on our own actual budgets.
1.1	**€0.00** Personal time (self-training).	Primary care doctors spend part of their personal time reviewing additional information related to psoriasis, such as the consensus document. This is a non-financial input, since it cannot be assessed economically.
1.2	**€1,048,911.80** Resources for the design and distribution of an informative triptych for patients newly diagnosed with psoriasis	▪ Design of the triptychs (€2,000)** ▪ Printing of 600,000 triptychs (€900,000)** ▪ Shipping of 600,000 triptychs (€77,322)** ▪ Distribution of triptychs within the primary care centres: wage for 1 hour for staff to distribute triptychs internally multiplied by the total number of primary care centres and local clinics in Spain (€69,589.80). [5,6] ** The costs of design, printing and shipping are calculated through real estimates from suppliers who are dedicated to providing these services.
1.3	**€0.00** Working time (awareness).	The dermatologist leaves aside a "paternalistic" attitude toward the patient, to enable joint decision making (specialist-patient) so that the patient can take responsibility for his/her health.

Proposals	Input (quantity and description)	Breakdown
		This comes from the input of the Psoriasis Working Group (1): working time (consensus document), so the cost is already covered.
2	**€807,560.45** Resources for the implementation of deferred teledermatology	▪ Cost of implementing teledermatology across the NHS, which includes training specialists, the photographic equipment and software (€4,927,375.42). [7,8] ▪ Deduct 26% of hospitals that already have teledermatology installed, since they do not incur the cost. [9] ▪ Use the part corresponding to the first year, taking into account that the average depreciation is 4.52 years. [10,11]
2	**€21,089,413.65** Resources for the use of deferred teledermatology	▪ The cost of using teledermatology (€88.74) multiplied by the number of mild psoriasis patients (764,671). [7,8,12] ▪ This cost is only applicable in hospitals without teledermatology (74%)[9] weighted by its use (42%). [13]
2	**€343,775.91** Working time (training).	This refers to training in teledermatology aimed at primary care doctors. The following must be taken into account when assessing the input: ▪ Number of primary care doctors in the NHS [14]: 28,176 ▪ Salary/hour of a primary care doctor: [4] €18.16 ▪ Time to train the primary care doctor: [15] 0.58 hours ▪ Salary/hour of a computer technician to teach how to use the software: [5] €10.10 ▪ Apply to only 74% of the centres as they are not yet using teledermatology. [9] ▪ The calculation is performed by multiplying the sum of the salary of primary care doctor plus that of the computer technician by the time spent on training, and all this by the number of primary care doctors, adjusting the final result by 74%.
2	**€7,235.7** Working time (training).	This refers to teledermatology training aimed at dermatologists: ▪ Number of dermatologists in the NHS: [14] 1,191 ▪ Salary/time of a dermatologist: [3] €14.5 ▪ Time dedicated to training by the dermatologist: [15] 0.33 hours ▪ Salary/hour of a computer technician to teach how to use the software: [5] €10.10 ▪ Apply to only 74% of the centres as they are not yet using teledermatology. [9] The calculation is performed by multiplying the sum of the dermatologist's salary plus that of the computer technician, multiplied by the time spent on training and the number of dermatologists, adjusting the final result by 74%.
3	**€3,803,805.17** Working time (meetings).	We have considered two-hour sessions four times a year, between primary care doctors and specialists in primary care nursing. The investment value for working time for these meetings is the product of multiplying these three amounts: ▪ Number of primary care doctors in the NHS: [14] 28 176 ▪ Average hourly salary for 8 hours per year: [4] €145.32 ▪ Percentage of health centres where this activity to improve the relationship between primary care and nursing is not implemented: [16] 92.9%

Proposals	Input (quantity and description)	Breakdown
3	**€1,956,213.11** Working time (meetings).	We have considered two-hour sessions four times a year, between primary care doctors and nursing specialists. The investment value for working time for these meetings is the product of multiplying these three amounts: ▪ Number of nursing specialists in the NHS: [14] 29,302 ▪ Average hourly salary for 8 hours per year: [17] €71.86 ▪ Percentage of health centres where this activity to improve the relationship between primary care and nursing is not implemented: [16] 92.9%
4	**€35,232,585.57** Working time (patient training).	Working time is estimated for expert consultations on two successive visits by patients to nursing multiplying the following values: ▪ Cost of two successive visits: [18] €49.60 ▪ Planned number of patients: [8,12] 764,671 ▪ Percentage of health centres where this activity is not implemented: [16] 92.9%
5	**€1,161,339.63** Working time (meetings).	They would devote one working day, once a month (minus one month in which they would be on holiday). Taking into account: ▪ Number of hospitals in NHS: [14] 453 ▪ 45.5% of hospitals where the meetings are not held yet.[2] ▪ The salary for 88 hours per year for the professionals who make up this multidisciplinary team: [3,4,17] €5,634.43
6	**€15,974,824.30** Working time (initial visit).	The cost of the visit [18] to treat patients with moderate psoriasis is used [8,12] (227,673). To give a value to this input the following must be taken into account: ▪ The visits to a dermatologist and a nurse would continue, so this cost is not counted as a new investment. ▪ Visit to a psychologist: €145.25 ▪ Visit to a hospital pharmacy: €151.10 ▪ Application of the cost for the hospital pharmacy visit only takes into account the percentage of patients receiving biologic treatments: [8] 5.9% ▪ Percentage of hospitals that do not currently undertake this form of consultation is: [2] 45.5%
7	**€20,446,395.2** Working time (prompt monitoring visit).	The cost of the successive visit to the various specialists[18] is used, since it is a prompt monitoring visit, to care for patients with moderate psoriasis. ▪ Visit to dermatologist: €84.44 ▪ Visit to a nurse: €24.80 ▪ Visit to a psychologist: €83.13 ▪ Visit to a hospital pharmacy: €84.44 ▪ Application of the cost for the hospital pharmacy visit only takes into account the percentage of patients receiving biologic treatments: [8] 5.9% ▪ Percentage of hospitals that do not currently undertake this form of consultation is: [2] 45.5%
8	**€2,568,904.87** Working time (visit).	This relates to an additional visit to hospital nursing staff to inform and refer patients with moderate psoriasis regarding the services to which they have access (psychology and dietetics). One visit per year is estimated (in addition to the initial and the prompt visits). ▪ Cost of successive visit to hospital nursing staff: [18] €24.80 ▪ Number of patients with moderate psoriasis: [8,12] 227,673 ▪ Percentage of NHS hospitals that have not yet implemented multidisciplinary units: [2] 45.5%

Proposals	Input (quantity and description)	Breakdown
9	**€57,292,844.41** Working time (visit).	▪ There are 167,113 [8,12] patients with moderate psoriasis whose emotional sphere is affected, i.e. 73.9% of the total. [19] ▪ It is estimated they will make nine successive visits to the specialist psychologist, giving a total cost of €748.16. [18] ▪ Percentage of NHS hospitals that have no specialist unit: [2] 45.5%.
10	**€9,876,996.35** Working time (visit).	▪ There are 143.662 [8,12] patients with severe psoriasis who have endocrine-metabolic problems, i.e. 63.1% of the total. [20]. ▪ It is estimated they will make one visit a year: [18] €151.10 ▪ Percentage of NHS hospitals that have no specialist unit: [2] 45.5%.
11	**€580,996.82** Implementation of phototherapy equipment in hospitals	▪ Cost of the implementation of phototherapy in all NHS hospitals (€11,971,088.38). [14,21] ▪ It is necessary to adjust for the 36.4% of hospitals that do not yet have a phototherapy unit as in the rest this investment is not necessary. [2] ▪ Use the part corresponding to the first year, taking into account that the average depreciation for the phototherapy equipment is 7.5 years. [10,11]
11	**€5,393,274.04** Resources for use of phototherapy equipment in hospitals	▪ The cost for the use of phototherapy in hospitals that do not yet have it (36.4%) is calculated from the cost of use per patient (€350.04) multiplied by the number of patients with moderate psoriasis who should receive phototherapy (42,347). [2,8,22]
12	**€580,669.82** Working time (meetings).	Following the same procedure as the input above, in this case it is considered that team members spend half a working day per month (minus one month in which they would be on holiday), since the number of patients with severe psoriasis is less than moderate psoriasis: ▪ The salary of 44 hours per year for the professionals who form the multidisciplinary team: [3,4,17] €2,817.21
13	**€10,121,629.26** Working time (initial visit).	The breakdown of this input is the same as in the case of moderate psoriasis, with the variation of the following data: ▪ Number of patients with severe psoriasis: [8,12] 80,016 ▪ Percentage of patients receiving biologic treatment: [8] 87.9%
14	**€9,704,743.44** Working time (prompt monitoring visit).	The breakdown of this input is the same as in the case of the prompt monitoring visit in moderate psoriasis, with the variation of the following data: ▪ Number of patients with severe psoriasis: [8,12] 80,016 ▪ Percentage of patients receiving biologic treatment: [8] 87.9%

Proposals	Input (quantity and description)	Breakdown
15	**€10,296.70** Resources for the design and distribution of a reference book for nurses specialising in psoriasis	▪ Design of the reference book: €4,000** ▪ Printing of 453 units: €1,132.50** ▪ Distribution of 453 copies: €2,718** ▪ Distribution of the reference book within the hospital: wage for 1 hour for staff to distribute the book internally to the appropriate place, informing the specialists of its availability (€5.40),[5] multiplied by the number of NHS hospitals (453). [14] ** The costs of design, printing and shipping are calculated through real estimates from suppliers who are dedicated to providing these services.
15	**€28,274.43** Working time to develop a reference book for nurses specialising in severe psoriasis	▪ Monthly salary of five dermatologists: [3] €17,435.58 ▪ Monthly salary of five specialist nurses: [17] €10,779.40 ▪ Salary for a day's work by administrative staff to post the reference books to all the NHS hospitals: [5] €59.46
15	**€150,316.77** Working time (specialised training).	Working time these professionals dedicate to train themselves, through a reference book for nurses specialising in severe psoriasis, along with the support of a dermatologist. An average of three nurses is considered, their salary for one working day, plus the salary for one working day of a dermatologist, multiplied by the number of NHS hospitals. ▪ Average salary of a nurse: [17] €71.86 ▪ Average salary of a dermatologist: [3] €116.24 ▪ Number of hospitals in NHS: [14] 453
15	**€0.00** Working time (pharmacovigilance training).	It is an activity that is already carried out in NHS hospitals by specialist nurses, so no amount is applied to the input.
16	**€902,846.89** Working time (visit).	The working time spent by specialist hospital nurses to inform and refer patients with severe psoriasis to services to which they have access (psychology and dietetics). One visit per year is estimated (in addition to the initial and the prompt visits). ▪ Cost of successive visit to hospital nursing staff: [18] €24.80 ▪ Number of patients with severe psoriasis: [8,12] 80,016 ▪ Percentage of NHS hospitals that have not yet implemented multidisciplinary units: [2] 45.5%
17	**€20,135,687.89** Working time (visit).	▪ There are 59.132[8,12] patients with severe psoriasis whose emotional sphere is affected, i.e. 73.9% of the total.[19] ▪ It is estimated they will make nine successive visits to the specialist psychologist, giving a total cost of €748.16. [18] ▪ Percentage of NHS hospitals that have no specialist unit: [2] 45.5%.
18	**€3,471,290.66** Working time (visit).	The calculation follows the same procedure as for the input for moderate psoriasis, with variation of the data for number of patients with endocrine-metabolic problems, of which there are 50,491. [8,12,20]

2. Economic valuation of outcomes

The main outcomes of this approach are for patients. Their monetisation is broken down in the following tables:

Table 2 Outcomes for patients with mild psoriasis

Outcome	Indicator	Appropriation of the impact	Monetisation
2.2. Reduction in the number of visits to dermatology based on the results of the deferred teledermatology.	Percentage of patients where referral to a dermatologist is not necessary	74%	€5,928,641.45
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with mild psoriasis: [8, 12] 764,671 ▪ Percentage of occasions when teledermatology is used: [13] 42% ▪ Percentage of patients where, after using teledermatology, it is not necessary to refer them to dermatology: [13] 40% ▪ Value of the "proxy". Difference between the cost of the first visit to dermatology minus the cost of teledermatology: [7,18] €62.36 ▪ Appropriation of the impact: 74%. Discount: o Deadweight: percentage of hospitals with implanted teledermatology already implemented: [9] 26%		
2.3. Referral of patients to secondary care when teledermatology deems it necessary.	Percentage of patients where it is necessary to refer to dermatology	74%	€-3,148,108.19
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with mild psoriasis: [8, 12] 764,671 ▪ Percentage of occasions when teledermatology is used: [13] 42% ▪ Percentage of patients where, after using teledermatology, it is necessary to refer to dermatology: [13] 60% ▪ Value of the "proxy". Sum of the cost of using teledermatology plus subsequent visit to dermatology: [7,18] €-22.08 ▪ Appropriation of the impact: 74%. Discount: o Deadweight: percentage of hospitals with implanted teledermatology already implemented: [9] 26%.		
1+2.1 Saving on a visit to a specialist dermatologist, when teledermatology does not deem it necessary to refer the patient to secondary care.	Percentage of patients arriving in dermatology with mild psoriasis that should not have been referred	100%	€2,305,933.76
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients arriving in dermatology with moderate psoriasis that should not have been referred: [23] 16.24% ▪ Value of the "proxy". Difference between the cost of the first visit to dermatology minus the cost of teledermatology: [7, 18] €62.36 ▪ Appropriation of the impact: 100%		
4.2 Better treatment compliance, which will mean an improvement in self-care	Percentage of patients that improve their self-care	93%	€32,624,038.15
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with mild psoriasis: [8,12] 764,671 ▪ Percentage of patients with the self-care sphere affected: [19] 8.5%		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Impact of proposal 5 on the self-care of patients: [16] 89.3% ▪ Value of the "proxy". Willingness to pay to improve self-care: [19] €602.27 ▪ Appropriation of the impact: 93%. Discount: o Deadweight: percentage of centres where proposal 5 is already carried out: [16] 7.1%		
4.3 Increased patient adherence, which will mean fewer outbreaks and a slower progression in severity.	Percentage of patients who would slow the progression of the disease	46%	€219,211,295.78
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with mild psoriasis: [8, 12] 764,671 ▪ Percentage of patients who would slow the progression of the disease if they adhered to the treatment: [16] 30% ▪ Average impact of proposal 5 on patients: [16] 75.7% ▪ Value of the "proxy". Direct healthcare cost of treating moderate psoriasis patients minus direct healthcare cost of treating a mild patient: [8] €2,718.85 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of centres where proposal 5 is already carried out: [16] 7.1% o Attribution: from a conservative perspective, it is considered that 50% of the return could be due to other causes beyond proposal 5		
4.4 Patients better accept their illness, which will improve their emotional state.	Percentage of patients who would improve their emotional state	93%	€253,535,700.76
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with mild psoriasis: [8, 12] 764,671 ▪ Percentage of patients with the emotional sphere affected: [19] 64.4% ▪ Impact of proposal 5 on patients' emotional sphere: [16] 83.6% ▪ Value of the "proxy". Willingness to pay to improve their emotional state: [19] €662.88 ▪ Appropriation of the impact: 93%. Discount: o Deadweight: percentage of centres where proposal 5 is already carried out: [16] 7.1%		
4.5 Lower number of outbreaks due to feeling better emotionally.	Percentage of patients who are better emotionally and reduce the number of outbreaks	46%	€103,990,202.22
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients who improve their emotional sphere: o Patients with mild psoriasis: [8, 12] 764,671 o Percentage of patients with their emotional sphere affected: [19] 64.4% o Impact of proposal 5 on patients' emotional sphere: [16] 83.6% ▪ Percentage of patients who would reduce their outbreaks if they adhered to treatment: [24] 40% ▪ Correction for the number of patients who would continue with a mild condition and not progress to moderate. A conservative perspective is taken (p = q = 0.5) so a weighting of 50% is used		

<table>
<tr><th>Outcome</th><th>Indicator</th><th>Appropriation of the impact</th><th>Monetisation</th></tr>
<tr><td></td><td colspan="3">▪ Value of the "proxy". Direct healthcare cost of treating moderate psoriasis patients minus direct healthcare cost of treating a mild patient: [8] €2,718.85
▪ Appropriation of the impact: 46%. Discount:
o Deadweight: percentage of centres where proposal 5 is already carried out: [16] 7.1%
o Attribution: from a conservative perspective, it is considered that 50% of the return could be due to other causes beyond proposal 5</td></tr>
<tr><td rowspan="2">4.6 The patients will receive information from social networks associated with the disease, so that they improve their social relationships.</td><td>Percentage of patients who would improve their social relationships</td><td>59%</td><td>€38,740,065.00</td></tr>
<tr><td colspan="3">The monetisation of the return is calculated by multiplying the following elements:
▪ Patients with mild psoriasis: [8, 12] 764,671
▪ Percentage of patients with the social relationships sphere affected: [19] 19.4%
▪ Impact of proposal 5 on patients social relationships sphere: [16] 74.3%
▪ Value of the "proxy". Willingness to pay for improved social relationships: [19] €601.19
▪ Appropriation of the impact: 59%. Discount:
o Deadweight: percentage of centres where proposal 5 is already carried out: [16] 7.1%
o Attribution: percentage of patients who obtained information from sources other than the health services: [25] 37%</td></tr>
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Table 3 Outcomes for patients with moderate psoriasis

Outcome	Indicator	Appropriation of the impact	Monetisation
8.2 An assessment of therapeutic evolution and efficacy using the PASI assessment criteria and comorbidities indicates a decrease in unscheduled visits to primary care occurs	Percentage of patients who reduce the overuse of visits to primary care	46%	€3,132,242.56
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients who use primary care medicine more than suggested in the clinical practice guide: [19] 26% ▪ Value of the "proxy". Average number of visits to primary care (for patients who overuse) minus visits stipulated by clinical practice, multiplied by the cost of each visit to primary care: [16, 18, 19] €116.29 ▪ Appropriation of the impact: 46%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
7.3 Changing treatment from systemic drugs to biologic treatment due to lack of efficacy or adverse effects.	Percentage of patients treated with systemic drugs that change to being treated with biologics	39%	€81,305,463.15
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of moderate-severe psoriasis patients usually treated with systemic drugs:[26] 45.8% ▪ Percentage of moderate-severe psoriasis patients treated with systemic drugs that change to being treated with biologics: [26] 51.1% ▪ Value of the "proxy". Direct healthcare cost of treating a serious patient minus direct healthcare cost of treating moderate a patient: [8] €3,945.34 ▪ Appropriation of the impact: 39%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5% ○ Displacement: percentage of direct healthcare expenditure represented by the systemic drugs: [22] 15%		
9.1 Improvement in the patient's emotional sphere	Percentage of patients whose emotional sphere would improve	46%	€46,321,394.49
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients with their emotional sphere affected: [19] 73.9% ▪ Impact of proposal 10 on patients' emotional sphere: [16] 83.9% ▪ Value of the "proxy". Willingness to pay to improve their emotional sphere: [19] €720.96 ▪ Appropriation of the impact: 46%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
9.2 Improvement in patient's leisure sphere occurs due to improved emotional sphere.	Percentage of patients with both their emotional sphere and leisure sphere affected who would improve the former	46%	€16,821,112.72
	The monetisation of the return is calculated by multiplying the following elements:		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients with their emotional sphere affected: [19] 73.9% ▪ Percentage of patients with both their emotional sphere and leisure sphere affected: [19] 64.4% ▪ Impact of Proposal 10 in patients leisure sphere: [16] 66.4% ▪ Value of the "proxy". Willingness to pay to improve their leisure sphere: [19] €513.67 ▪ Appropriation of the impact: 46%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
9.3 The improvement in the emotional sphere produces an improvement in the patient's sexuality sphere.	Percentage of patients with both their emotional sphere and sexuality spheres affected who would improve the former	46%	€15,767,101.58
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients with their emotional sphere affected: [19] 73.9% ▪ Percentage of patients with both their emotional sphere and sexuality sphere affected: [19] 30.7% ▪ Impact of Proposal 10 on patients' family sphere: [16] 72.5% ▪ Value of the "proxy". Willingness to pay to improve their sexuality sphere: [19] €745.79 ▪ Appropriation of the impact: 46%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
10.1 Improvement in the patient's self-care sphere.	Percentage of patients who would improve their self-care (diet, exercise)	46%	€25,067,617.34
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients with endocrine-metabolic disorders: [20] 63.1% ▪ Impact of Proposal 11 in the sphere of patient self-care: [16] 82.1% ▪ Value of the "proxy". Willingness to pay to improve their self-care sphere: [19] €467.11 ▪ Appropriation of the impact: 46%. Discount: ○ Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
1.5 Patient empowerment regarding decisions about their own treatment.	Percentage of patients who would want to reach a mutual agreement regarding treatment and who would accept it	18%	€12,195,060.00
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients who would like to reach a mutual agreement with their specialist regarding their illness: [27] 57.2% ▪ Correction for the number of patients who would be able to reach a mutual agreement. Estimate of more favourable scenario: 95%		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Value of the "proxy". Willingness to pay to improve their daily activities sphere: [19] €535.71 ▪ Appropriation of the impact: 18%. Discount: o Deadweight percentage of cases that have already reached a mutual agreement (taking into account only patients who want the agreement): [27] 81.6%		
11.1 Creating universal access to treatment with phototherapy.	Percentage of patients who would be treated with phototherapy	36%	€4,513,020.43
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of patients who normally use phototherapy: [8] 18.6% ▪ Percentage of patients with psoriasis treated with phototherapy:[28] 54.0% ▪ Value of the "proxy". Cost of treating a moderate psoriasis patient with a conventional systemic drug: [22] €542.41 ▪ Appropriation of the impact: 36%. Discount: o Deadweight: percentage of hospitals that already have a phototherapy service: [2] 63.6%		
Global Outcome: Improvement in labour productivity.	Percentage of patients who reduce the number of days off work because of psoriasis	46%	€23,005,566.82
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of moderate-severe psoriasis patients who had some time off work in the last year: [29] 13.0% ▪ Value of the "proxy". Average cost of lost labour productivity in one year, calculated from the annual average number of days off for this type of patient and the state average wage: [5, 29] €1,708.28 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (1).	Percentage of patients who miss work to go to a monitoring visit and a nursing visit	46%	€-1,462,198.47
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 3 hours) [5] €-21.72 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (2).	Percentage of patients who miss work to attend nine psychology sessions per year	46%	€-4,864,091.32
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Percentage of patients whose emotional sphere is affected:[19] 73.9% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 13.5 hours) [5] €-97.72 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (3).	Percentage of patients who miss work to go to a yearly session with a dietitian	46%	€-461,326.44
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with moderate psoriasis: [8, 12] 227,673 ▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Percentage of patients with endocrine-metabolic disorders: [20] 63.1% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 1.5 hours) [5] €-10.86 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		

Table 4 Outcomes for patients with severe psoriasis

Outcome	Indicator	Appropriation of the impact	Monetisation
14.2 An assessment of therapeutic evolution and efficacy using the PASI assessment criteria and comorbidities indicates a decrease in unscheduled visits to primary care occurs	Percentage of patients who would reduce the overuse of visits to dermatology	46%	€1,100,856.59
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients who use primary care medicine more than suggested in the clinical practice guide: 26% ▪ Value of the "proxy". Average number of visits to primary care (for patients who overuse) minus visits stipulated by clinical practice, multiplied by the cost of each visit to primary care: [18, 19] €116.29 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
14+16.1 Better treatment compliance, which will mean an improvement in self-care	Percentage of patients who would improve their self-care	100%	€4,526,717.11
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients whose self-care sphere is affected: [19] 14.5% ▪ Impact of Proposal 20 in the sphere of self-care: [16] 83.8%		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Value of the "proxy". Willingness to pay to improve the sphere of self-care: [19] €467.11 ▪ Appropriation of the impact: 100%		
17.1 Improvement in the patient's emotional sphere	Percentage of patients whose emotional sphere would improve	100%	€35,225,364.90
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients whose emotional sphere is affected: [19] 73.9% ▪ Impact of Proposal 21 in the sphere of self-care: [16] 82.6% ▪ Value of the "proxy". Willingness to pay to improve the emotional sphere: [19] €720.96 ▪ Appropriation of the impact: 100%		
17.2 Improvement in patient's leisure sphere occurs due to improved emotional sphere.	Percentage of patients with both their emotional sphere and leisure sphere affected who would improve the former	100%	€13,423,787.11
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients whose emotional sphere is affected: [19] 73.9% ▪ Percentage of patients with both their emotional sphere and leisure sphere affected: [19] 64.4% ▪ Impact of Proposal 21 in the sphere of self-care: [16] 68.6% ▪ Value of the "proxy". Willingness to pay to improve the leisure sphere: [19] €513.67 ▪ Appropriation of the impact: 100%		
17.3 The improvement in the emotional sphere produces an improvement in the patient's sexuality sphere.	Percentage of patients with both their emotional sphere and sexuality spheres affected who would improve the former	100%	€12,565,757.02
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients whose emotional sphere is affected: [19] 73.9% ▪ Percentage of patients with both their emotional sphere and sexuality sphere affected: [19] 38.1% ▪ Impact of Proposal 21 in the sphere of self-care: [16] 74.8% ▪ Value of the "proxy". Willingness to pay to improve the sexuality sphere: [19] €745.79 ▪ Appropriation of the impact: 100%		
18.1 Improvement in the patient's self-care sphere.	Percentage of patients who would improve their self-care (diet, exercise)	100%	€19,763,690.79
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of patients with endocrine-metabolic disorders: [20] 63.1% ▪ Impact of Proposal 22 in the sphere of self-care: [16] 83.8%		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Value of the "proxy". Willingness to pay to improve the sphere of self-care: [19] €467.11 ▪ Appropriation of the impact: 100%		
Global Outcome: Improvement in labour productivity.	Percentage of patients who reduce the number of days off work because of psoriasis	46%	€8,085,914.98
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of moderate-severe psoriasis patients who had some time off work in the last year: [29] 13.0% ▪ Value of the "proxy". Average cost of lost labour productivity in one year, calculated from the annual average number of days off for this type of patient and the state average wage: [5, 29] €1,708.28 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (1).	Percentage of patients who miss work to go to a monitoring visit and a nursing visit	46%	€-513,895.75
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 3 hours) [5] €-21.72 Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (2).	Percentage of patients who miss work to attend nine psychology sessions per year	46%	€-1,709,532.60
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8, 12] 80,016 ▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Percentage of patients whose emotional sphere is affected: [19] 73.9% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 13.5 hours) [5] €-97.72 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		
Global Outcome: Decrease in labour productivity (3).	Percentage of patients who miss work to go to a yearly session with a dietitian	46%	€-162,134.40
	The monetisation of the return is calculated by multiplying the following elements: ▪ Patients with severe psoriasis: [8,12] 80,016		

Outcome	Indicator	Appropriation of the impact	Monetisation
	▪ Percentage of moderate-severe psoriasis patients who are currently working: [19] 65% ▪ Percentage of patients with endocrine-metabolic disorders: [20] 63.1% ▪ Value of the "proxy". Average cost of lost labour productivity in a year (estimate: 1.5 hours) [5] €-10.86 ▪ Appropriation of the impact: 46%. Discount: o Deadweight: percentage of hospitals with multidisciplinary units: [2] 54.5%		

Table 5 Outcomes for misdiagnosed patients

Outcome	Indicator	Appropriation of the impact	Monetisation
1+2.2. Patients will receive the correct diagnosis for their condition.	Percentage of patients misdiagnosed (without psoriasis) who will get a correct diagnosis	0%	€0.00
	The monetisation of the return is calculated by multiplying the following elements: Misdiagnosed patients (without psoriasis): [12, 30] 932,488 Correction for the number of patients who would be diagnosed correctly. A conservative approach is taken (p = q = 0.5) so a weighting of 50% is used. Value of the "proxy". Average cost of treating a patient with mild psoriasis: [8] €838.55 Appropriation of the impact: 0%. Discount: Displacement: 100%. The saving involved in this outcome that will become a cost (saving by ceasing to treat a patient without psoriasis, which is transformed into the cost of treating them for their disease).		
1+2.3 Improvement in the general well-being of patients for being properly diagnosed and having better control over their disease.	Percentage of well-diagnosed patients, who were previously misdiagnosed	100%	€155,029,234.87
	The monetisation of the return is calculated by multiplying the following elements: Misdiagnosed patients (without psoriasis): [12, 30] 932,488 Correction for the number of patients who would be diagnosed correctly. A conservative approach is taken (p = q = 0.5) so a weighting of 50% is used. Value of the "proxy". Willingness to pay to be rid of their disease: [29] €332.51 Appropriation of the impact: 100%		

Table 6 Outcomes for incident patients

Outcome	Indicator	Appropriation of the impact	Monetisation
1.3 Patients receive specific information about their disease.	Percentage of patients that would be better targeted and informed from this triptych	49%	€1,247,357.97
	The monetisation of the return is calculated by multiplying the following elements: Incident patients: [31] 65 274 Percentage of patients who read the clinical information they receive: [32] 80.5% Value of the "proxy". Annual membership fee to Psoriasis Action: [33] €48.00 Appropriation of the impact: 49%. Discount: Deadweight: 43% have a family history of psoriasis so they can already be informed in this way; applying a conservative correction of 50%, leaves a deadweight of 21.5%. [20] Attribution: 37% of the patients receive information from sources outside the clinics. [25]		

Table 7. Outcomes for undiagnosed patients

Outcome	Indicator	Appropriation of the impact	Monetisation
Improvement in general well-being for being properly diagnosed and having better control over their health problem	There are insufficient data to estimate the social return on this outcome.		

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