| Stage of<br>Journey | Timeline                                                                                                                                  | Clinical presentation / symptoms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Identify patient needs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ideal outcome/ support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| First<br>symptoms   | A few months before<br>diagnosis – people of all<br>ages but primarily in<br>patients over 50 yrs old;<br>extremely rare in children      | <ol> <li>Warning signs that cannot yet be<br/>attributed to the disease - these<br/>appear, disappear, reappear and<br/>then it " flares up "; intermittent<br/>flare-ups</li> <li>Painful white blisters in the<br/>mouth, under the tongue, on the<br/>gums, in the cheeks; these<br/>blisters burst and leak out</li> <li>Shedding of skin from tongue,<br/>gums and cheeks</li> <li>Progressive difficulty in eating,<br/>swallowing and breathing, in<br/>sleeping flat to avoid choking</li> <li>Scabs in the nose and bleeding</li> <li>Cough</li> <li>Anal bleeding</li> <li>Spitting up a lot</li> </ol> | <ol> <li>Need to be quickly diagnosed</li> <li>Need to find the right expert: going<br/>to several appointments with general<br/>practitioners, stomatologists, ENT<br/>(both local and in hospital),<br/>occupational physician; none know<br/>what we have and usually say so,<br/>and, take photos; these visits are<br/>often useless - we prefer that a<br/>doctor tell us that he doesn't know<br/>what we have and direct us to<br/>someone who may know</li> <li>Ineffectiveness of the treatments<br/>given because of lack of diagnosis</li> </ol> | <ol> <li>Avoiding diagnostic delay (6 to 9<br/>months)</li> <li>Being able to get support, kindness<br/>and attention from the doctors we<br/>meet; this is not always the case<br/>because many imply that what is<br/>happening to us is "in our head"</li> <li>Taking into account the pain of the<br/>disease and its secondary<br/>symptoms, the difficulties we have<br/>in eating and the anxiety linked to<br/>multiple painful examinations<br/>(biopsies, samples, blood exams)</li> <li>Taking into account fatigue,<br/>sleeping difficulties, anxiety related<br/>to diagnostic delays and<br/>misdiagnosis. These uncertainties<br/>are difficult to deal with, as well as<br/>the problems due to treatment<br/>errors by doctors who do not know<br/>how to treat this rare disease</li> <li>Taking into account the impact of<br/>the disease on patients' sexual life</li> <li>Dealing with precautionary<br/>measures taken to protect one's<br/>family in the event of death due to<br/>these symptoms</li> </ol> |
| Diagnosis           | <ol> <li>Pemphigus vulgaris</li> <li>Usually established<br/>between a 3 to 12<br/>month delay. In<br/>patients with exclusive</li> </ol> | 1. White blisters in the mouth and<br>on the skin that burst, leak and<br>leave painful wounds; scabs on<br>the scalp; pieces of the inside                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1. Preparing for your first appointment<br>with the AIBD dermatologist: if<br>possible, go with someone and with a<br>list of questions prepared in advance                                                                                                                                                                                                                                                                                                                                                                                                  | 1. Feeling more confident: knowing<br>that the doctor knows the<br>pathology is crucial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|            | oral lesions, the<br>diagnosis of<br>pemphigus is<br>frequently evoked<br>after other more<br>common diseases of<br>the oral cavity have<br>been first suspected,<br>(oral ulcers, in<br>particular ) by GP,<br>dentists or<br>stomatologists.<br>3. First appointment<br>with the AIBD<br>dermatologist | cheek, gums and tongue that<br>shed off<br>2. Oral, nasal, vaginal and anal<br>mucous membranes may be<br>affected. Eyes are rarely<br>involved in pemphigus | 2.<br>3.<br>4.<br>5. | new vocabulary to be able to<br>understand doctors: B cells,<br>lymphocytes, immune system, auto<br>antibodies, biotherapies, and so on<br>Seeing an AIBD trained specialist for<br>each affected part of the body –<br>dermatologist, stomatologist,<br>proctologist, ophthalmologist,<br>rheumatologist, gynecologist, ENT<br>Feeling relief from pain, itching and<br>burning sensation on the skin | <ol> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol> | examinations in order to "own"<br>one's own health<br>Being able to consult AIBD<br>dermatologists and specialists<br>(ENT, rheumatologist, gynecologist,<br>ophthalmologist, have a bone<br>density test done), if possible, all at<br>once (in a day care hospital, for<br>example, or, through coordinated<br>consultations) and hope that these<br>different doctors communicate<br>their results among themselves<br>Being able to benefit from<br>psychological support<br>Begin understanding that life and<br>daily life will change and start<br>getting informed about what needs<br>to change in daily activities -<br>especially at work<br>Having a disrupted sex life when<br>you have painful blisters and<br>lesions in the vagina or on the<br>penis; and, finding it difficult to talk<br>to doctors about this<br>Being able to share with others who<br>have gone through the same<br>experiences – <del>for</del> support and<br>understanding from peers and<br>patient organisations |
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| Treatments | Before diagnosis is<br>established (waiting for<br>the results of the biopsy,<br>for histological<br>examination and direct<br>immunofluorescence                                                                                                                                                        | <ol> <li>Weakening and thinning skin<br/>but pain relief</li> </ol>                                                                                          | 1.<br>2.             | Understanding the disease<br>Being able to have access to a<br>patients' association that explains<br>how the disease works, that refers to<br>the right doctors and that allows                                                                                                                                                                                                                       | 1.                                                         | Being informed, better<br>understanding our illness in order<br>to become an active participant in<br>our treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| which usually needs a 7-    |                                    | patients to ask the questions they      |                                         |
|-----------------------------|------------------------------------|-----------------------------------------|-----------------------------------------|
| 15 days delay ):            |                                    | don't dare ask the doctors              |                                         |
| 1. antiseptic               |                                    |                                         |                                         |
| mouthwashes                 |                                    |                                         |                                         |
| 2. topical steroids (skin,  |                                    |                                         |                                         |
| mouthwashes, nose)          |                                    |                                         |                                         |
| 3. small amounts of         |                                    |                                         |                                         |
| topical lidocaïne erase     |                                    |                                         |                                         |
| the symptoms and            |                                    |                                         |                                         |
| allow you to eat            |                                    |                                         |                                         |
| AFTER:                      |                                    |                                         |                                         |
| 1. oral corticosteroids for | 1. Corticosteroids quickly relieve | 1. Understanding treatments and their   | 1. Understanding side effects because   |
| a duration of between       | flare-ups, but trigger a state of  | side effects to know if these are       | they are upsetting; being able to       |
| 6months (when               | excitability and of great fatigue; | normal or if they should alert us       | recognize their importance so that      |
| corticosteroids are         | feeling of having fewer blisters   | 2. Learning how to manage pain,         | you know when to inform your            |
| combined with               | in the mouth; easier breathing     | itching and lack of sleep               | doctors                                 |
| rituximab) to several       |                                    | 3. Getting help from weekly             | 2. Being able to contact one's AIBD     |
| years (in patients          | 2. Immuno-suppressive drugs and    | physiotherapy or balneo-therapy         | specialist and family doctor, and/or    |
| treated with                | biologics allow rapid reduction    | sessions to help with the difficulties  | a referring nurse in case of need       |
| corticosteroids alone       | of corticosteroid therapy;         | to move around                          | 3. Treating pain, excitability, lack of |
| or combined with            | lesions usually heal within 2 to 3 | 4. Checking osteoporosis                | sleep other than by additional          |
| conventional                | months after rituximab infusions   | 5. Getting psychological follow-up      | allopathic treatments - favoring        |
| immunosuppressants),        |                                    | sessions                                | hypnosis, relaxation, and so on;        |
| usually associated          |                                    | 6. Re-learning to eat - following a new | and, getting financial coverage for     |
| with potassium ,            |                                    | salt-free and low-sugar diet and not    | these sessions                          |
| proton pomp                 |                                    | eating anything that is likely to       | 4. Learning how to manage your diet     |
| inhibitors, calcium         |                                    | irritate the mouth                      | with the help of dieticians so as to    |
| and vitamin D3, or          |                                    | 7. Understanding blood sampling         | avoid excessive weight gain or loss     |
| biphosphonate ( in          |                                    | related to the use of certain drugs     | 5. Not minimizing the effects of        |
| patients with a high        |                                    | 8. Careful monitoring of blood test to  | steroid withdrawal                      |
| risk of osteopenia)         |                                    | track and diagnose early the            | 6. Getting to know the limits between   |
| 2. Rituximab: initial       |                                    | potential side effects of treatments    | what is normal and what is              |
| treatment based on 2        |                                    | 9. Applying non-adhesive, tubular       | essential                               |
| infusions 2 weeks           |                                    | dressings                               | 7. Being cared for by professionals     |
| apart followed by           |                                    | 0                                       | who deal with osteoporosis              |
| maintenance infusions       |                                    |                                         |                                         |
|                             |                                    |                                         |                                         |

|          | at months 6, 12 & 18<br>depending on the<br>evolution of clinical<br>lesions and the change<br>in serum anti-<br>desmoglein antibodies<br>3. Conventional<br>immunosuppressants<br>agents (most often<br>mycophenolate<br>mofetil or<br>azathioprine)<br>if rituximab is<br>contraindicated,<br>unavailable or not<br>reimbursed<br>4. IVIGs: In Europe, and<br>according to the<br>European guidelines,<br>this treatment is given<br>in the case of a<br>refractory pemphigus |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                              | <ol> <li>Being cared for by professionals for<br/>local care</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                         |
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| Relapses | <ol> <li>New itching or pain<br/>which are early signs<br/>of new blisters (on<br/>skin and mucous<br/>membranes)</li> <li>Relapses may occur<br/>within a few months<br/>after stopping<br/>corticosteroids ( in<br/>particular in patients<br/>with persistent high<br/>titers of anti-<br/>desmoglein<br/>antibodies) or during</li> </ol>                                                                                                                                   | <ol> <li>New blisters or scabs on the<br/>skin, scalp and mucous<br/>membranes</li> <li>These relapses do not always<br/>affect the same part of the body<br/>as the first outbreaks: they can<br/>attack the mucous membranes<br/>instead of the skin and vice<br/>versa</li> </ol> | <ol> <li>Figuring out how many new blisters<br/>does it take, in a given time, to<br/>consider it a relapse and notify<br/>doctors</li> <li>Learning to know how to recognize a<br/>relapse if it is located in a place that<br/>has not been affected previously</li> </ol> | <ol> <li>Having the possibility to contact the specialist doctor or a referring person in order to know if the relapse is minor and only requires monitoring, or, if a quick consultation with an AIBD trained specialist (dermatologist, rheumatologist, gynecologist, dentist, ENT etc) is needed</li> <li>For patients who have received rituximab as a first-line treatment, understanding why the dermatologist suggests a preventive infusion if necessary (if</li> </ol> |

|                                          | <ul> <li>corticosteroid dose<br/>tapering. Most<br/>relapses occur after<br/>tapering corticosteroid<br/>lower than 15mg/day;<br/>or after reaching a<br/>lower level</li> <li>Maintenance<br/>rituximab infusions<br/>aim at reducing and<br/>avoiding relapses</li> </ul>                                               |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | the antibody level changes) or a<br>regular monitoring (an antibody<br>check every three months and a<br>check-up every 6 months)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Follow-up<br>and burden o<br>the disease | <ol> <li>ELISA blood test<br/>performed regularly<br/>(antibody check)</li> <li>Consultation with<br/>AIBD dermatologist<br/>(every 3 to 6 months<br/>in patients with active<br/>lesions and thereafter<br/>every 6-12 months in<br/>patients in remission)</li> <li>Throughout the course<br/>of the disease</li> </ol> | <ul> <li>Increase, decrease or absence of blisters and sores</li> <li>Side effects of treatment</li> <li>Occurrence of bacterial or viral super-infections (streptococci, staphylococci, herpes, fungi)</li> <li>Frequent feeling of sensitivity, fragility and physical discomfort in the mucous membranes and skin – even after the disappearance of blisters and erosions</li> </ul> | <ol> <li>Preparing a list of questions before<br/>each appointment with your AIBD<br/>doctor</li> <li>Getting regular blood tests to check<br/>for anti-desmoglein antibodies<br/>(disease activity), to check for<br/>kidney, and liver functions; to check<br/>for blood cell count, potassium,<br/>glycemia and so on, depending on the<br/>treatment received (tolerance of<br/>treatment)</li> <li>Need for a comprehensive<br/>management of disease symptoms<br/>and side effects - need for<br/>physiotherapy; in case of super-<br/>infections, treat them promptly</li> </ol> | <ol> <li>Understanding your blood test<br/>results so that you can notify your<br/>doctor if necessary</li> <li>Understanding your antibody levels<br/>and the following stages of<br/>treatments and the evolution of the<br/>disease</li> <li>Being able to stay in contact with<br/>the health care professionals that<br/>follow you in order to handle the<br/>side effects resulting from the<br/>treatments and those that are<br/>ongoing</li> <li>Establishing a communication link<br/>between your general practitioner<br/>and your specialist doctor</li> <li>Providing a quick relief from super-<br/>infections</li> <li>Improving nurse care: dressings<br/>take time to do - and nurses don't<br/>have enough time to take on<br/>patients with PV</li> </ol> |

|                                                                                                                                                                                                                                   | 3. Being informed about vaccines:<br>knowing which ones are necessary:<br>for instance, the flu and the<br>pneumococcal vaccines must be<br>administered before rituximab and<br>immunosuppressant agents;<br>knowing which ones are not<br>recommended and which ones are<br>contra-indicated – like living<br>vaccines: for instance, the one<br>against yellow fever cannot be<br>administered to patients taking<br>immunosuppressants agents or<br>rituximab |                                                                                                                                                                                                                                                                                                                                                                               |
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| <ul> <li>Everyday problems, issues and concerns:</li> <li>1. Problems relating to the way other people look at you – burden of others' gaze: issue of rejection, exclusion from one's social and/or family environment</li> </ul> | <ul><li>Everyday problems, issues and concerns:</li><li>1. Being able to get psychological counseling</li></ul>                                                                                                                                                                                                                                                                                                                                                   | <ul> <li>Everyday problems, issues and concerns:</li> <li>1. Being able to have access to psychological and group support - being able to contact people who are going through the same situation in order to ask practical questions and exchange tips and tricks that help in everyday life – getting support from official patient organisations (peer support)</li> </ul> |
| 2. Intimate life related issues: all dimensions of sexuality are affected - because of a degraded self-image, intense fatigue, erection problems, lubrication problems and so on                                                  | 2. Difficulty in sharing sexuality issues with our doctors                                                                                                                                                                                                                                                                                                                                                                                                        | 2. Same as 1                                                                                                                                                                                                                                                                                                                                                                  |
| 3. Considering pregnancy? Young women have to think about planning one because rituximab                                                                                                                                          | 3. Being able to manage a pregnancy with pemphigus                                                                                                                                                                                                                                                                                                                                                                                                                | 3. To be able to carry out the pregnancy without difficulty for the baby and the mother: need for                                                                                                                                                                                                                                                                             |

| and some immunosuppressant<br>agents are contraindicated<br>during pregnancy (steroids and<br>azathioprine are allowed)                                                                                                                 |                                                                                                                                                 | ongoing communication between<br>the gynecologist, the dermatologist<br>and the general physician.                                                                                                                                      |
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| <ul> <li>4. Administrative problems related to the illness and their consequences on daily life (difficulty in obtaining loans – for instance, a loan for home ownership; additional costs from private insurance companies)</li> </ul> | <ol> <li>Getting help with administrative<br/>tasks and checking the availability of<br/>social coverage</li> </ol>                             | 4. Being able to get help from administrative medical staff                                                                                                                                                                             |
| 5. Difficulty in combining work,<br>family life and personal and<br>social life with the disease - at<br>work people think we are<br>pretending to be tired and we<br>are seen as lazy                                                  | 5. Adapting working hours to the intensity and complications of the illness                                                                     | 5. Getting support to manage<br>challenges at work -<br>accommodating the workstation;<br>understanding frequent absences,<br>exhaustion; getting support from<br>occupational health physicians;<br>getting help with household chores |
| 6. Financial problems, outstanding balances due to out-of-cost care                                                                                                                                                                     | 6. Finding a solution to the very high cost of care: the remaining expenses are significant and have an impact on the family's financial health | 6. Finding the necessary contacts in the necessary institutions to push forward the reimbursement policy for our care, which is very costly                                                                                             |
| 7. Foreign travel/travel<br>arrangements (see above for<br>vaccines)                                                                                                                                                                    | 7. Being able to set up these trips requires careful organization                                                                               | <ol> <li>Making sure you have your medical<br/>records with you so that you can<br/>deal with any emergency in the<br/>event of a relapse<br/>Traveling with sufficient<br/>medication for the duration of the<br/>trip</li> </ol>      |