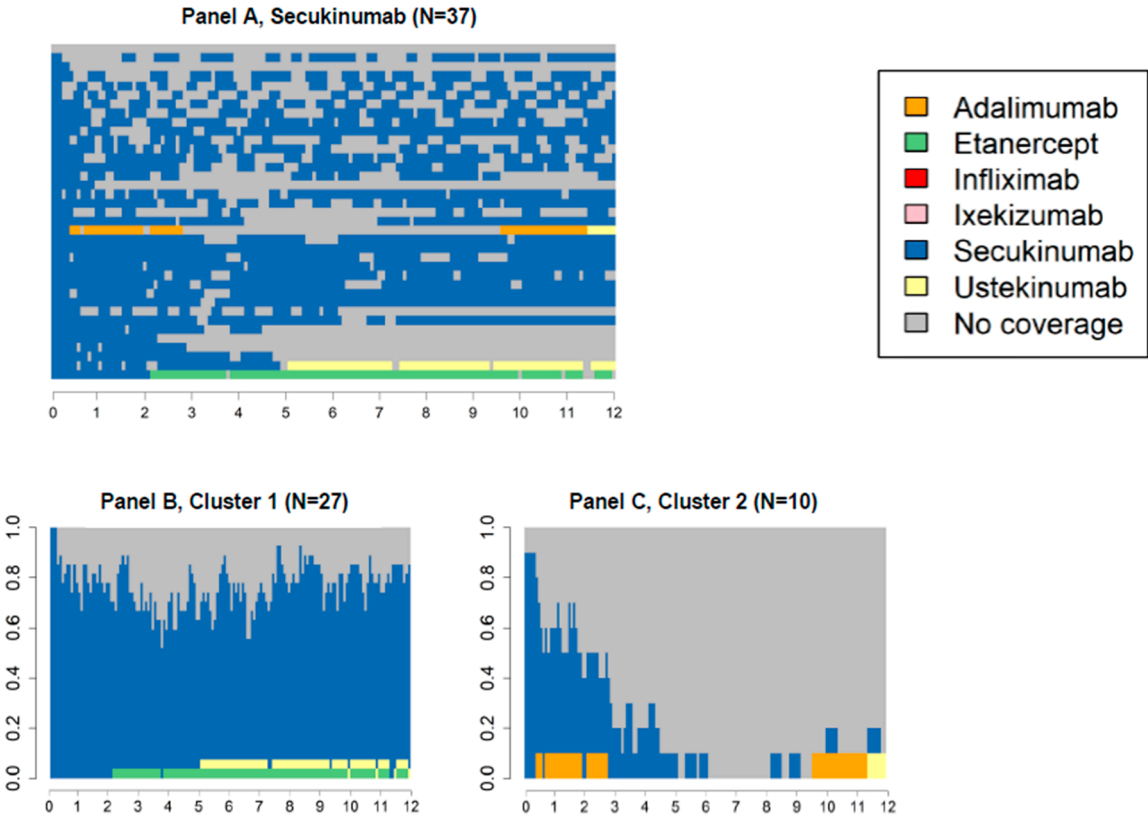


**Table S1.** Covariates: socio-demographic factors, concomitant therapies and comorbidities

<i>Socio-demographic factors</i>	Age, gender
<i>Concomitant therapies</i>	<ul style="list-style-type: none"> <li>- Glucocorticoid for systemic use: ATC codes H02AB*</li> <li>- Non-Steroidal Anti-Inflammatory Drugs (NSAIDs): ATC codes M01A*</li> <li>- Opioid analgesics: ATC codes N02A*</li> <li>- Small-molecule drugs for psoriasis: <ul style="list-style-type: none"> <li>• Acitretin, ATC code D05BB02;</li> <li>• Antipsoriatics for topical use, ATC code D05A;</li> <li>• Apremilast, ATC code L04AA32;</li> <li>• Cyclosporin, ATC code L04AD01;</li> <li>• Methotrexate, ATC code L04AX03;</li> <li>• Psoralens for systemic use, ATC code D05BA;</li> <li>• Psoralens for topical use, ATC code D05AD;</li> <li>• Retinoids for treatment of psoriasis, ATC code D05BB.</li> </ul> </li> </ul>
<i>Comorbidities</i>	<p>The following comorbidities recorded during one year before the index prescription will be evaluated:</p> <ul style="list-style-type: none"> <li>- Lung disease: ICD-9 codes 490–493.99, 494, 495, 496, 500–505.99, 515–517.99; exemptions code 007*, 024*</li> <li>- Myocardial infarction: ICD-9 codes 410–412.99</li> <li>- Other CV disease: ICD-9 codes 394–396.99, 402, 404, 413–414.99, 424.0–424.3, 425–428.99; exemptions code A02*, B02* 021*</li> <li>- Stroke: ICD-9 codes 430–431.99, 433–435.99, 997.02</li> <li>- Hypertension: ICD-9 codes 401, 405; exemptions code, A31*, D31*</li> <li>- Diabetes: ICD-9 codes 249–250.99; exemptions code 013*</li> <li>- Fracture (of hip/spine/leg): ICD-9 codes 733.13–733.16, 733.93, 733.96–733.98, 805–806.99, 808, 820–821.99, 823, 827</li> <li>- Depression: ICD-9 codes 296.2–296.39, 300.4, 311</li> <li>- Gastrointestinal ulcer: ICD-9 codes 531</li> <li>- Other gastrointestinal disorders: ICD-9 codes 532–535.7, 536.3, 536.8–536.9, 578.9</li> <li>- Sjögren's syndrome: ICD-9 codes 710.2*</li> <li>- Rheumatoid nodules: ICD-9 codes 446.0*</li> <li>- Felty's syndrome: ICD-9 codes 714.1*</li> <li>- Myopathies: ICD-9 codes 359.6*</li> <li>- Polyneuropathy: ICD-9 codes 357.1*</li> <li>- Cancer: ICD-9 codes 140* - 239*; ATC L01* (excluding methotrexate); exemption code 048*</li> </ul>

**Figure S1.** State sequences plots of the group starting biological therapy with secukinumab, overall and by cluster



**Figure S2.** State sequences plots of the group starting biological therapy with ustekinumab, overall and by cluster

