

SUPPLEMENTARY MATERIALS

Title: Cumulative Duration of Severe Psoriasis: A Novel Cardiovascular Risk Predictor for Dermatologists

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Supplementary Figure 1. Questionnaire

1. When did your psoriasis skin symptoms first appear?
2. When did you first experience severe psoriasis? Severe psoriasis is defined as having more than 10 palm-sized lesions on the body, requiring systemic therapy or whole-body phototherapy, or PASI > 10, or BSA > 10.
3. Are you currently or have you previously received systemic treatment for psoriasis? If yes, please specify the treatment(s) and the date(s) you received them.
4. Have you ever taken any breaks from receiving systemic treatment? If yes, please specify when the breaks occurred and the reason(s) for stopping systemic treatment.
5. Did you experience severe psoriasis while receiving topical or systemic treatment(s) or during breaks from systemic treatment?

Supplementary Information 1.

Detailed protocol for cardiac computed tomography

Computed tomography (CT) imaging of the heart was performed using energy-integrating and photon-counting detector CT scanners (CardioGraphe, GE Healthcare, Brilliance iCT 256, Phillips and Somatom Force, Siemens Healthineers at the Heart and Vascular Centre, Semmelweis University, Budapest, Hungary; Naetomom Alpha, Siemens Healthineers at the Medical Imaging Centre, Semmelweis University, Budapest, Hungary). Non-contrast CT (NCCT) and contrast-enhanced, prospectively electrocardiogram-triggered coronary CT (CECT) in accordance with Society of Cardiovascular Computed Tomography guidelines were conducted[1]. For heart rate control, oral or intravenous metoprolol was administered if needed, while patients received sublingual nitroglycerine before contrast agent injection to enhance coronary visualisation. Image acquisition was timed to diastole or systole based on the heart rate of the patient after premedication (< 70 or $\geq$ beats per minute). A four-phase contrast injection protocol was utilised with 85-95 ml of contrast agent delivered at a flow rate of 4.5-5.5 ml/s[2]. Different coronary artery disease (CAD) phenotypes were collected from the CT reports reflecting stenosis severity (coronary artery disease – reporting and data system (CAD-RADS)), and extent of the disease (segment involvement score (SIS), coronary artery calcium score (CACS)). CACS was calculated on NCCT images using the Agatston method using a semi-automated software (Syngo.via, Siemens Healthineers). Coronary CECT images were assessed with semi-quantitative scores of CAD to quantify CAD burden and severity using SIS

[3]. The SIS reflects the number of coronary artery segments affected by plaque, categorised as follows: SIS ≤ 2 (mild), SIS 3-4 (moderate), SIS 5-7 (severe), and SIS ≥ 8 (extensive). In addition, CAD-RADS stenosis severity categories were also determined, by detecting the degree of the most severe stenosis in the coronary artery system (0: 0%, 1: 1-24%, 2: 25-49%, 3: 50-69%, 4: A) 70-99% or B) left main $>50\%$ or three-vessel disease, 5: 100%) according to the CAD-RADS consensus document[4].

References for Supplementary Information 1.

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3. Bittencourt MS, Hulten E, Ghoshhajra B, et al. Prognostic value of nonobstructive and obstructive coronary artery disease detected by coronary computed tomography angiography to identify cardiovascular events. *Circ Cardiovasc Imaging*. 2014;7(2):282–91.
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