

# ***Patrick Lauwers***



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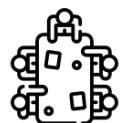
Antwerp University Hospital, Department of Thoracic and Vascular Surgery,  
Multidisciplinary Diabetic Foot Clinic, Drie Eikenstraat 655, B 2650 Edegem,  
Belgium



patrick.lauwers@uza.be



Medical Doctor, Antwerp University Hospital, Belgium (1989-1996)  
Formation in General Surgery (1996-2003)  
Recognition in Vascular Surgery (2007)  
PhD, University of Antwerp, Belgium: "Diabetic foot and diabetes-related  
amputations in Belgium. Facts, figures and the underexposed nutritional aspect."  
(2024)



IQED-foot (Initiative for Quality improvement and Epidemiology in Diabetic Foot Clinics). Member of the national expert group since 2005.  
BSVS Working group on endovascular surgery and vascular diagnostics. Board member since 2012, secretary since 2014, president since 2021.  
BSVS Working group on open surgery. Board member since 2016.  
Diabetes Liga (patient organisation), Working group on diabetic foot. Member since 2012, President since 2020.

## Publications (diabetes/diabetic foot)

Early endothelial dysfunction in young type 1 diabetics. Hurks R, Eisinger MJ, Goovaerts I, Van Gaal L, Vrints C, Weyler J, Hendriks J, Van Schil P, Lauwers P. Eur J Vasc Endovasc Surg 2009;37(5):611-5. doi: 10.1016/j.ejvs.2009.01.015

Implementation of a quality improvement initiative in Belgian diabetic foot clinics: feasibility and initial results. Doggen K, Van Acker K, Beele H, Dumont I, Félix P, Lauwers P, Lavens A, Matricali GA, Randon C, Weber E, Van Casteren V, Nobels F; Initiative for Quality Improvement and Epidemiology in Diabetic Foot Clinics (IQED-Foot) Study Group. Diabetes Metab Res Rev 2014;30(5):435-43. doi: 10.1002/dmrr.2524

Paclitaxel-coated versus plain old balloon angioplasty for the treatment of infrainguinal arterial disease in diabetic patients: the Belgian diabetic IN.PACT Trial. Debing E, Aerden D, Vanhulle A, Gallala S, von Kemp K; TRIAL Investigators. J Cardiovasc Surg 2017;58(4):528-34. doi: 10.23736/S0021-9509.16.09685-3

Hyperbaric Oxygen Therapy in the Treatment of Ischemic Lower Extremity Ulcers in Patients With Diabetes: Results of the DAMO<sub>2</sub>CLES Multicenter Randomized Clinical Trial. Santema KTB, Stoekenbroek RM, Koelemay MJW, Reekers JA, van Dortmont LMC, Oomen A, Smeets L, Wever JJ, Legemate DA, Ubbink DT; DAMO<sub>2</sub>CLES Study Group. Diabetes Care 2018;41(1):112-9. doi: 10.2337/dc17-0654

Decreasing rates of major lower-extremity amputation in people with diabetes but not in those without: a nationwide study in Belgium. Claessen H, Avalosse H, Guillaume J, Narres M, Kvirkina T, Arend W, Morbach S, Lauwers P, Nobels F, Boly J, Van Hul C, Doggen K, Dumont I, Felix P, Van Acker K, Icks A. Diabetologia 2018;61(9):1966-77. doi: 10.1007/s00125-018-4655-6.

Malnutrition according to the 2018 GLIM criteria is highly prevalent in people with a diabetic foot ulcer but does not affect outcome. P Lauwers, JMH Hendriks, S Van Bouwel, A Verrijken, K Van Dessel, C Van Gils, F Peiffer, K Yugeswaran, Ch De Block, E Dirinck. Clinical Nutrition Espen, 2021. Doi 10.1016/j.clnesp.2021.03.029

ABCC8 variants in MODY12: Review of the literature and report of a case with severe complications. Timmers M, Dirinck E, Lauwers P, Wuyts W, De Block C. Diabetes Metab Res Rev. 2021 Apr 24:e3459. doi: 10.1002/dmrr.3459.

Temporal trends in major, minor and recurrent lower extremity amputations in people with and without diabetes in Belgium from 2009 to 2018. Lauwers P, Wouters K, Vanoverloop J, Avalosse H, Hendriks J, Nobels F, Dirinck E; Belgian Amputation Group. Diabetes Res Clin Pract. 2022 Jun 26;189:109972. doi: 10.1016/j.diabres.2022.109972.

Malnutrition and its relation with diabetic foot ulcer severity and outcome: a review. Lauwers P, Dirinck E, Van Bouwel S, Verrijken A, Van Dessel K, Van Gils C, Sels M, Peiffer F, Van Schil P, De Block C, Hendriks J. Acta Clin Belg. 2022 Feb;77(1):79-85. doi: 10.1080/17843286.2020.1800315.

Impact of diabetes on medical costs in the pre- and postoperative year of lower extremity amputations in Belgium. Lauwers P, Hendriks JMH, Wouters K, Vanoverloop J, Avalosse H, Dirinck E, Nobels F; Belgian Amputation Group. Diabetes Res Clin Pract 2023;23:207. doi: 10.1016/j.diabres.2023.111072. Online ahead of print. PMID: 38142745

The impact of diabetes on mortality rates after lower extremity amputation. Lauwers P, Wouters K, Vanoverloop J, Avalosse H, Hendriks JMH, Nobels F, Dirinck E; Belgian Amputation Group. Diabet Med 2024;41(1):e15152. doi: 10.1111/dme.15152.

Sex differences in diabetic foot ulcer severity and outcome in Belgium. Vanherwegen AS, Lauwers P, Lavens A, Doggen K, Dirinck E; Initiative for Quality Improvement and Epidemiology in multidisciplinary Diabetic Foot Clinics (IQED-Foot) Study Group. PLoS One 2023;18(2):e0281886. doi: 10.1371/journal.pone.

Early feasibility study with an implantable near-infrared spectroscopy sensor for glucose, ketones, lactate and ethanol. De Ridder F, Braspenning R, Ordonez JS, Klarenbeek G, Lauwers P, Ledeganck KJ, Delbeke D, De Block C. PLoS One. 2024 May 3;19(5):e0301041. doi: 10.1371/journal.pone.0301041.

Impact of diabetes on medical costs in the pre- and postoperative year of lower extremity amputations in Belgium. Lauwers P, Hendriks JMH, Wouters K, Vanoverloop J, Avalosse H, Dirinck E, Nobels F; Belgian Amputation Group. Diabetes Res Clin Pract 2024;207:111072. doi: 10.1016/j.diabres.2023.111072.

## **Oral and Poster presentations (diabetes/diabetic foot)**

V<sup>th</sup> Diabetic Foot Conference (Noordwijkerhout, The Netherlands, 9-12/5/2007).

Necrotic Diabetic Foot Ulcers: not always a lost case. P Lauwers, J Hendriks, S Van Bouwel, J Nouwen, D Ballaux. (Poster)

World Congress of the International Union of Angiology XXIII (Athens, Greece, 21-25/6/2008).

Early Endothelial Dysfunction in Young Diabetics. MJ Eisinger, R Hurks, I Goovaerts, L Van Gaal, C Vrints, P Van Schil, J Weyler, P Lauwers. (Oral)

VI<sup>th</sup> Diabetic Foot Conference (Noordwijkerhout, The Netherlands, 11-14/5/2011).

Outcome of MRSA-positive patients with a diabetic foot ulcer. P Lauwers, H Janssens, S Van Bouwel, S De Munck, J Hendriks, M Hertoghs, P Van Schil, G Ieven. (Poster)

Influence of peripheral arterial occlusive disease on the diagnosis of osteomyelitis in patients with diabetic foot infections. P Lauwers, K Wouters, S De Decker, M Leysen, S Van Bouwel, T Daems, J Hendriks, M Hertoghs, P Van Schil. (Poster)

Evaluation of SPECT-CT as a new imaging technique in patients with diabetic foot infections. P Lauwers, I Huyghe, D Mortelmans, M Trongthiang, S Van Bouwel, M Talloen, S Stroobants. (Poster)

X<sup>th</sup> Meeting of the Diabetic Foot Study Group (Potsdam, Germany, 28-30/9/2012).

Evaluation of SPECT/CT as a new imaging technique in patients with diabetic foot infections. P Lauwers, D Mortelmans, I Huyghe, M Trongthiang, J Hendriks, M Hertoghs, P Van Schil, S Van Bouwel, N Bolsens, L Van Gaal, S Stroobants. (Oral)

Hyperbaric Oxygen Therapy as additional treatment option in a patient with chronic refractory osteomyelitis. D Mortelmans, M Trongthiang, P Lauwers, S Vluyen, S Van Bouwel, N Bolsens, L Van Gaal. (Poster)

XI<sup>th</sup> Meeting of the Diabetic Foot Study Group (Sitges, Spain, 20-22/9/2013).

What brings the future to patients after amputation? P Lauwers, B Balduyck, E Coeckelbergh, Y Kong, J Hendriks, M Hertoghs, P Van Schil, S Van Bouwel, J Somville, L Van Gaal. (Poster)

XII<sup>th</sup> Meeting of the Diabetic Foot Study Group (Bratislava, Slovakia, 12-14/9/2014).

Health Related Quality of Life in patients with diabetic foot ulcers - a systematic review of the literature. E Coeckelbergh, P Lauwers, Y Kong, K Bernaerts, S Van Bouwel, J Hendriks, P Van Schil, L Van Gaal. (Poster)

VII<sup>th</sup> International Symposium on the Diabetic Foot (The Hague, The Netherlands), 20-23/5/2015.

Charcot and PAD: just coincidence? P Lauwers, S Van Bouwel, E Dirinck, K Clotman, J Hendriks, P Van Schil, J Somville, L Van Gaal. (Oral)

XIII<sup>th</sup> Meeting of the Diabetic Foot Study Group (Stuttgart, Germany, 9-11/9/2016).

Deformation at first presentation is associated with ulceration in active Charcot foot: a prospective follow-up study of 62 patients of the IQED-foot study. J Vermeersch, K Doggen, I Dumont, P Felix, P Lauwers, F Nobels, C Randon, G Matricali. (Poster)

Impact of a diabetic foot ulcer: the family's point of view. Y Kong, E Dirinck, E Coeckelbergh, P Lauwers, S Van Bouwel, J Hendriks, P Van Schil, L Van Gaal. (Poster)

Impact of a diabetic foot ulcer: the patient's point of view. E Coeckelbergh, P Lauwers, Y Kong, E Dirinck, S Van Bouwel, J Hendriks, P Van Schil, L Van Gaal. (Poster)

XIV<sup>th</sup> Meeting of the Diabetic Foot Study Group (Porto, Portugal, 8-10/9/2017).

Major lower-extremity amputations in people with and without diabetes in Belgium, 2009-2013. P Lauwers, F Nobels, H Claessen, H Avalosse, J Guillaume, I Dumont, P Felix, J Boly, M Narres, W Arend, S Morbach, A Icks, K van Acker. (Oral)

Declining offloading rate in Belgian recognized diabetic foot clinics: results from an audit-feedback quality improvement initiative. I Dumont, K Deschamps, V Eenhoorn, P Felix, S Houthoofd, P Lauwers, G Matricali, C Randon, E Weber, K Doggen. (Oral)

Evaluation of SPECT/CT in patients with diabetic foot infections - a five year's experience. F Aka, J Van Hattem, E Dirinck, P Lauwers, I Huyghe, S Van Bouwel, L Longueville, L Stockman, S Stroobants, J Somville, J Hendriks, P Van Schil, L Van Gaal. (Oral)

XV<sup>th</sup> Meeting of the Diabetic Foot Study Group (Berlin, Germany, 28-30/9/2018).

The foot and the kidney: is there a relation between chronic kidney disease and diabetic foot ulcer, and does CKD affect the outcome of the ulcer? C Franssen, E Devriendt, E Dirinck, A Van Craenenbroeck, S Van Bouwel, F Peiffer, J Hendriks, P Van Schil, Ch De Block, P Lauwers. (Top 10 poster session, 2nd price)

Flexor tenotomy in the treatment of toe ulcers: a feasibility study. L Stockman, L Longueville, E Dirinck, S Van Bouwel, Ch Jacobs, A Roels, J Hendriks, P Van Schil, Ch De Block, J Somville, P Lauwers. (Poster)

VIII<sup>th</sup> International Symposium on the Diabetic Foot (The Hague, The Netherlands, 22-25/5/2019).

Is There a Vacancy for the Nutritionist in a Multidisciplinary DFU Team? P Lauwers, S Van Bouwel, J Hendriks, A Verrijken, K Van Dessel, C Van Gils, F Peiffer, Ch De Block, E Dirinck. (Oral)

Nutritional status, ulcer severity and outcome in DFU patients: is there a link? A single centre, prospective, observational cohort study. P Lauwers, S Van Bouwel, J Hendriks, A Verrijken, K Van Dessel, C Van Gils, F Peiffer, Ch De Block, E Dirinck. (Poster)

Characteristics, Treatment and 6-Month Outcomes of 738 Patients with a Diabetic Foot Ulcer and Critical Limb Ischemia. K Doggen, F Nobels, H Beele, I Dumont, P Lauwers, G Matricali, K Van Acker, M Vandenbroucke, C Randon. (Oral)

Which ulcer and patient characteristics can guide clinicians in determining the risk of non-healing of a diabetic foot ulcer? F Mbela Lusendi, G Matricali, F Nobels, H Beele, I Dumont, P Lauwers, C Randon, K Van Acker, M Vandenbroucke, K Doggen. (Poster)

XVI<sup>th</sup> Meeting of the Diabetic Foot Study Group (online, 18-20/9/2020).

Malnutrition in a diabetic foot ulcer population: prevalence, and relation to ulcer severity and outcome. P Lauwers, J Hendriks, S Van Bouwel, K Van Dessel, A Verrijken, C Van Gils, F Peiffer, SK Yugeswaran, Ch De Block, E Dirinck. (e-poster)

Educational level and DFU severity and outcome. A Benkheil, N Gerets, M Bertels, S Van Bouwel, F Peiffer, SK Yugeswaran, J Hendriks, Ch De Block, E Dirinck, P Lauwers. (e-poster)

Do patients hospitalised for a diabetic foot ulcer suffer from chronic kidney disease and does chronic kidney disease affect the severity and the outcome of the ulcer? A pilot study. E Devriendt, C Franssen, S Van Bouwel, F Peiffer, SK Yugeswaran, J Hendriks, Ch De Block, E Dirinck, P Lauwers. (e-poster)

Gender differences in severity and outcomes of diabetic foot ulcers during a follow-up period of 6 months. AS Vanherwegen, K Doggen, P Lauwers, E Dirinck. (e-poster)

EASD Virtual Meeting, 21-25/9/2020.

Malnutrition in a diabetic foot ulcer population: prevalence, and relation to ulcer severity and outcome. P Lauwers, J Hendriks, S Van Bouwel, K Van Dessel, A Verrijken, C Van Gils, F Peiffer, SK Yugeswaran, Ch De Block, E Dirinck. (e-poster)

XVII<sup>th</sup> Meeting of the Diabetic Foot Study Group (online, 24-25/9/2021).

How independent, based on the IADL score, are patients admitted for a diabetic foot ulcer? M Bertels, A Benkheil, N Gerets, Ch De Block, J Hendriks, S Van Bouwel, E Dirinck, P Lauwers. (e-poster)

The COVID-19 pandemic strongly reduced the presentation rate of diabetic foot ulcers in Belgium, but the impact on severity was limited to slightly larger lesions. AS Vanherwegen, F Nobels, K Doggen, E Dirinck, P Lauwers, the IQED-Foot COVID-19 Working Group. (e-poster)

XVIII<sup>th</sup> Meeting of the Diabetic Foot Study Group (Bratislava, Slovakia, 16-18/9/2022).

Temporal trends in major, minor and recurrent lower extremity amputations in Belgium from 2009 to 2018. Lauwers P, Wouters K, Vanoverloop J, Avalosse H, Nobels F, Dumont I, Matricali G, Felix P, Hendriks J, Dirinck E. (Oral)

Mortality rates after lower extremity amputation in Belgium from 2009 to 2018. Dirinck E, Wouters K, Vanoverloop J, Avalosse H, Nobels F, Dumont I, Matricali G, Felix P, Hendriks J, Lauwers P. (Oral)

Continuation of care despite COVID-19 pandemic results in stable outcomes: a nationwide cohort study in Belgium. A.-S. Vanherwegen, E. Dirinck, P. Lauwers, F. Nobels, IQED-Foot COVID-19 Working Group. (Poster)

Assessment of the effectiveness of the current nutritional support in reaching the daily energy requirements of patients hospitalized for a diabetic foot ulcer. Baart AS, Vandenbranden C, Bouly L, Van Gils C, De Peuter I, Turcksin M, Van Bouwel S, De Block Ch, Hendriks J, Dirinck E, Lauwers P. (Poster)

European Association for the Study of Diabetes (EASD) 58<sup>th</sup> Annual Meeting (Stockholm, Sweden, 19-23/9/2022).

Temporal trends in major, minor and recurrent lower extremity amputations in Belgium from 2009 to 2018. Lauwers P, Wouters K, Vanoverloop J, Avalosse H, Nobels F, Dumont I, Matricali G, Felix P, Hendriks J, Dirinck E. (Oral)

Mortality rates after lower extremity amputation in Belgium from 2009 to 2018. Dirinck E, Wouters K, Vanoverloop J, Avalosse H, Nobels F, Dumont I, Matricali G, Felix P, Hendriks J, Lauwers P. (Oral)

Belgian Association for the Study of Obesity, Winter Symposium 2023 (Brussels, Belgium, 3/2/2023).

Prevalence of malnutrition in normal weight, overweight and obese subjects, hospitalized due to a diabetic foot ulcer. P Lauwers, J Hendriks, S Van Bouwel, A Verrijken, K Van Dessel, Ch De Block, E Dirinck. (Oral)

24th Belgian Surgical Week (Ostend, Belgium, 27-29/4/2023).

Mortality rates after lower extremity amputation in Belgium from 2009 to 2018. Lauwers P, Dirinck E, Wouters K, Vanoverloop J, Avalosse H, Nobels F, Dumont I, Matricali G, Felix P, Hendriks J. (Oral)

IX<sup>th</sup> International Symposium on the Diabetic Foot (The Hague, The Netherlands, 10-13/5/2023),  
Moderator of session PO6.5, Epidemiology 3

The financial burden of lower extremity amputation: analysis of total medical costs in the pre- and postoperative year in Belgium. P Lauwers, E Dirinck, K Wouters, J Vanoverloop, H Avalosse, G Matricali, P Felix, I Dumont, J Hendriks, F Nobels. (Oral)

Evolution of patient characteristics and outcomes concerning diabetic foot ulcer care in Belgium between 2008 and 2020. Vanherwegen An-Sofie, Matricali G, Aerden D, Lauwers P, Dirinck E, Dumont I, Nobels F, Randon C. (Oral)

Degree of independent living after lower extremity amputation in Belgium: impact of amputation level, diabetes, age and gender. P Lauwers, F Nobels, K Wouters, J Vanoverloop, H Avalosse, G Matricali, P Felix, I Dumont, J Hendriks, E Dirinck. (Poster)

Prescription of a functional prosthesis after major lower extremity amputation in Belgium. P Lauwers, F Nobels, K Wouters, J Vanoverloop, H Avalosse, G Matricali, P Felix, I Dumont, J Hendriks, E Dirinck. (Poster)

45th ESPEN Congress on Clinical Nutrition and Metabolism (Lyon, France, 11-14/9/2023).

Assessment of the effectiveness of the current nutritional support in reaching the daily energy requirements of patients hospitalized for a diabetic foot ulcer. Lauwers P, Van Gils C, De Peuter I, Van Bouwel S, De Block Ch, Hendriks J, Dirinck E. (Poster)

25th Belgian Surgical Week (Ostend, Belgium, 25-27/4/2024),

Impact of diabetes on medical costs in the pre- and postoperative year of lower extremity amputations in Belgium. Lauwers P, Nobels F, Hendriks JMH, Wouters K, Vanoverloop J, Avalosse H, Dirinck E, Hendriks JMH; Belgian Amputation Group. (Oral)

Independency after lower extremity amputation. Prescription of a functional prosthesis after major amputation, and degree of independent living after minor and major amputation in Belgium in the period 2009-2018. Lauwers P, Nobels F, Hendriks JMH, Wouters K, Vanoverloop J, Avalosse H, Dirinck E, Hendriks JMH; Belgian Amputation Group. (Oral)

XIX<sup>th</sup> Meeting of the Diabetic Foot Study Group (Valencia, Spain, 6-8/9/2024)

Independency after lower extremity amputation. Prescription of a functional prosthesis after major amputation, and degree of independent living after minor and major amputation in Belgium in the period 2009-2018. P Lauwers, F Nobels, K Wouters, J Vanoverloop, A Hervé, G Matricali, I Dumont, J Hendriks, E Dirinck. (Oral, 3<sup>rd</sup> price of Top 5 Oral Session)