

Title of the project: TEXDERM - Comfortable textiles and clothing fulfilling specific needs of kids with skin problems

Grant Agency: Ministry of Industry and Trade, Trio

Project Number: FV20287

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Starting date: 01.07.2017

Duration (years): 4

Total funds allocated for project - Kč (thousands): 1135

Summary of 2018 results

Title of the presentation: Preparation of tests of clothing for kids with skin problems

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Three types of textile fibres have been chosen on the basis of needs of kids with skin diseases: Tencel micro, Viloft micro and viscose with vitamin E impregnation. One side knitted clothing made from these fibres will be tested in Technical University (Liberec) laboratories to assess their physical properties. The main emphasis will be given to permeability, heat conductivity, sensoric comfort, penetrability for water vapour and tendency to lumping.

The Study protocol has been established and the agreement of Ethical Committee was acquired for practical wearing tests of clothes for kids with skin diseases (especially atopic dermatitis). The first kid will be enrolled into the Study at the beginning of 2019.

As the ready-to-wear sample was chosen pyjamas with flat seams, both in natural colour and dyed by non-allergogenic colours. Four sizes of pyjamas were prepared for testing in children aged 3 to 12 years. Testing period will be 2 months.

Washability of each of the pyjamas using commercial soap powders will be performed after staining the clothes with common dermatological topical ointments. Clinical examination of the skin, assessment of skin pH and skin microbiom will be monitored before and after wearing tests. Comparable tests with 8 samples of commercial textiles designated to very sensitive and/or inflamed skin will also be performed.

Final approval of safety will be done in the State Health Institute in Prague after clinical evaluation of tested textiles.

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