

# WORKSHOP ON ATOPIC DERMATITIS PRAGUE 2006

26. – 28.5.2006

**Odborný program konference:**

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**pátek 26. května**

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**sobota 27. května**

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**neděle 28. května**

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PRAGUE 2006**

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**Pátek 26. května • Friday May 26th**

Čas • Time

15:00-15:15 **OFICIÁLNÍ ZAHÁJENÍ KONFERENCE**

15:15-15:30 **Úvodní slovo k atopické dermatitidě**  
(MUDr. R. Klubal)

15:30-16:15 **Prof. MUDr. J. Lokaj, CSc.**  
*„Kůže - kompartment imunitního systému“*

16:15-17:00 **Prof. MUDr. P. Barták, DrSc.**  
*„Langerhansovy buňky a atopická dermatitida“*

17:00-17:45 **Prof. MUDr. H. Tlaskalová-Hogenová, DrSc.**  
*„Normální bakteriální flora, alergie a účinky probiotik“*

17:45-18:30 **As. MUDr. Š. Čapková**  
*„Léčba atopického ekzému z pohledu dermatologa“*

18:30-19:15 **Prof. RNDr. V. Hořejší, DrSc.**  
*„Regulační lymfocyty T“*

19:15 **Ukončení přednáškové části 1. dne konference**

19:30 **Odjezd přistaveným autobusem na společnou večeři v pilseněské restauraci Olympia v Praze 1.**



Občanské sdružení pro alergiky,  
astmatiky a ekzematiky Máša  
(Máš Alergii?)

Národní 9, 110 00 Praha 1  
Tel.: 222 075 133, Fax:  
222 075 132

[www.masa.cz](http://www.masa.cz) - [info@masa.cz](mailto:info@masa.cz)

**Sobota 27. května • Saturday, May 27th**

Čas • Time

8:45 **Zahájení 2. dne konference**

9:00-9:30 **MUDr. R. Klubal**  
*„Genetické aspekty atopické dermatitidy“*

9:30-10:00 **Prim. MUDr. N. Benáková**  
*„Diagnostická kritéria pro atopickou dermatitidu“*

10:00-10:30 **Prim. MUDr. V. Gutová**  
*„SCORAD - klinické hodnocení tíže atopické dermatitidy“*

10:30-11:00 **Coffeebreak /káva, čaj, minerálka, chlebičky/**

11:00-11:30 **MUDr. R. Klubal**  
*„Laboratorní vyšetření u atopické dermatitidy“*

11:30-12:00 **MUDr. I. Nentwich, PhD**  
*„Imunologie mateřského mléka“*

12:00-12:30 **Prim. MUDr. M. Fuchs**  
*„Alergie na kravské mléko“*

12:30-13:30 **Oběd /formou bufetového menu vč. nápojů/**

13:30-14:00 **Prof. MUDr. F. Novotný, DrSc.**  
*„Balneoterapie - imunomodulační nástroj“*

14:00-14:30 **Prim. MUDr. J. Nebesař**  
*„Význam komplex. Lázeň. léčby dětí - alergiků, astmatiků a ekzematiků“*

14:30-15:00 **D. J. Atherton MA MB BChir FRCP**  
*„Systemic treatment for severe atopic eczema in children“*

15:00-15:30 **Mgr. I. Kudliková/J. Hubert, PhD**  
*„Přehled o roztočích“*

15:30-16:00 **Prof. RNDr. J. Krejsek, DrSc.**  
*„Staphylococcus aureus a atopický ekzém“*

16:00-16:30 **MUDr. R. Klubal**  
*„Lymfocyty B, žírné buňky, eosinofily“*

16:30-17:00 **Coffeebreak /káva, čaj, minerálka, koláčky/croissant/**

17:00-17:30 **Prim. MUDr. M. Selerová**  
*„Psychosomatické aspekty atopické dermatitidy“*

17:30-18:00 **Uwe Gieler**  
*„Atopic Dermatitis - a neurogenic disease?“*

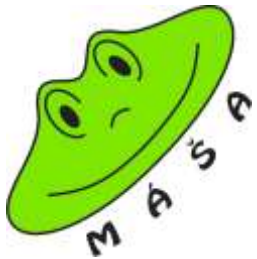
**MUDr. R. Klubal/MUDr. A. Vocilková**  
*„Kosmetické aspekty atopické dermatitidy“*

18:00-18:30 **OFICIÁLNÍ UKONČENÍ KONFERENCE**

18:45 **Odjezd přistaveným autobusem na koncerty Pražského jara.**

**Časový program přednášek**

Máš alergii?

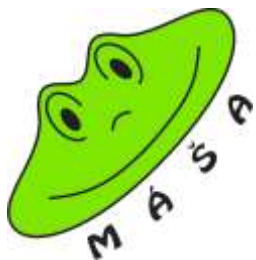




Máš alergii?  
květen 2001



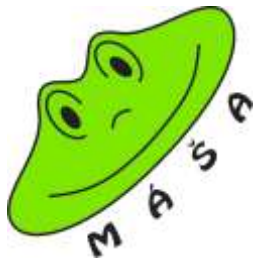
Máš alergii?  
květen 2001



Máš alergii?  
květen 2001



- ✓ Máš alergii?
- ✓ květen 2001
- ✓ dobrovolníci



- ✓ Máš alergii?
- ✓ květen 2001
- ✓ dobrovolníci



- ✓ Máš alergii?
- ✓ květen 2001
- ✓ dobrovolníci



✓ Máš alergii?



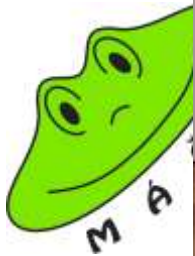
✓ Máš alergií?



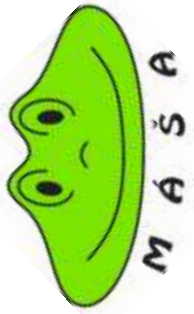


- ✓ Máš alergii?
- ✓ duben 2005

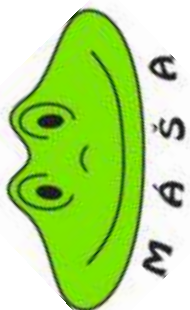








- ✓ Máš alergii?
- ✓ duben 2005
- ✓ Eva Görtlerová





# MĀŠA

Občanské sdružení pro ekzematiky,  
astmatiky a alergiky

*Sídlo:*  
Národní 9  
110 00 Praha 1

*Spojení:*  
Tel.: 222 075 133  
Fax: 222 075 132

*č.ú. u ČSOB:*  
175640595 / 0300  
*E-mail:* masa@masa.cz  
*Internet:* www.masa.cz

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Občanské sdružení „Máša“ (Máš alergii) je určeno všem,  
kdo mají něco společného s alergiemi, ekzémy nebo astmatem.



Cílem občanského sdružení „Máša“ je:

- 1) usnadnit alergikům jejich každodenní život
  - poskytování informací (publikace, telefonicky, e-mailem, osobní konzultaci, odkazy na odborníky)
  - pořádání pravidelných seminářů a přednášek pro laickou veřejnost
  - pořádání pravidelných seminářů a přednášek pro odbornou veřejnost
  - organizování ozdravných pobytů v ČR i v zahraničí
  - prosazování a hájení zájmů pacientů ve společnosti
  - garance kvality výrobků pro alergiky
- 2) vytvořit skupinu lidí ochotných pomáhat nemocným (lékaři, pacienti, dobrovolníci)
- 3) podpora výzkumu alergických nemocí

*Občanské sdružení pro ekzematiky, astmatiky a alergiky „Máša“  
registrované u MV ČR dne 4.5.2001, IČ: 26531640  
předseda sdružení a garant projektu: MUDr. Radek Klůbal*



**NUTRICIA**



**Biopath**





A young child with light hair and blue eyes is sitting down, wearing a light-colored, vertically striped short-sleeved shirt and white socks. The child's skin is severely affected by atopic dermatitis, with extensive, bright red, inflamed patches and thick, scaly crusts covering large areas of the face, neck, arms, and legs. The child's expression is one of discomfort or distress. The background is a dark, textured surface.

**WORKSHOP ON ATOPIC DERMATITIS  
PRAGUE 2006**

**26. - 28.5.2006**

A young child with light hair and blue eyes is sitting down, wearing a light-colored striped shirt and white socks. The child's skin, particularly on the arms and legs, shows significant redness and irritation, characteristic of atopic dermatitis. The child is looking towards the camera with a neutral expression. The background is dark and out of focus.

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PRAGUE 2006**

26. - 28.5.2006

A young child with light hair and blue eyes is sitting down, wearing a light-colored striped shirt. The child's skin is severely affected by atopic dermatitis, with extensive redness, swelling, and crusting, particularly on the arms and legs. The child is looking towards the camera with a slightly open mouth. The background is dark and textured.

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## Synonyma

- ✓ **Neurodermitis** (1891)
- ✓ Besnier´s **prurigo** (1903)
- ✓ **Neurodermitis** diffusa (1928)
- ✓ Atopic dermatitis (1933)
- ✓ Endogenous eczema (1954)
- ✓ **Neurodermitis** constitutionalis sive atopica (1967)
  
- ✓ Fitzpatrick – Atopic Dermatitis (Atopic Eczema) (2003)
- ✓ Braun-Falco – Atopie und atopisches Ekzem (2005)
- ✓ Rajka – 4th Georg Rajka Symposium on Atopic Dermatitis (září 2005)

- ✓ **atopie**
- ✓ **dermatitida/ekzém**
- ✓ **nervový systém**



- ✓ **atopie**
- ✓ **dermatitida/ekzém**
- ✓ **nervový systém**

## **1990** //

atopie

- astma, rinokonjunktivitida
- imunita
  - IgE
  - antigen-prezentující buňky (LCs)
  - lymfocyty T (Th2 vs. Th1)
  - žírné buňky, eosinofily, basofily
  - Staphylococcus aureus

- ✓ **atopie**
- ✓ **dermatitida/ekzém**
- ✓ **nervový systém**

## **1990** - - - - -

- |             |                                     |
|-------------|-------------------------------------|
| atopie      | - astma, rinokonjunktivitida        |
|             | - imunita                           |
|             | - IgE                               |
|             | - antigen-prezentující buňky (LCs)  |
|             | - lymfocyty T (Th2 vs. Th1)         |
|             | - žírné buňky, eosinofily, basofily |
|             | - Staphylococcus aureus             |
| dermatitida | - kožní bariera (xeroza)            |
|             | - nenasycené mastné kyseliny (GLA)  |



- ✓ **atopie**
- ✓ **dermatitida/ekzém**
- ✓ **nervový systém**

## **1990** - - - - -

- |                |  |
|----------------|--|
| atopie         | <ul style="list-style-type: none"><li>- astma, rinokonjunktivitida</li><li>- imunita<ul style="list-style-type: none"><li>- IgE</li><li>- antigen-prezentující buňky (LCs)</li><li>- lymfocyty T (Th2 vs. Th1)</li><li>- žírné buňky, eosinofily, basofily</li><li>- Staphylococcus aureus</li></ul></li></ul> |
| dermatitida    | <ul style="list-style-type: none"><li>- kožní bariera (xeroza)</li><li>- nenasycené mastné kyseliny (GLA)</li></ul>  |
| nervový systém | <ul style="list-style-type: none"><li>- pruritus</li><li>- psychická labilita (neurodermitis)</li><li>- autonomní nervová dysbalance (bílý dermografismus)</li></ul>   |

**1990** -----

**2006** -----

- |                |  |
|----------------|--|
| atopie         | <ul style="list-style-type: none"><li>- astma, rinokonjunktivitida</li><li>- imunita<ul style="list-style-type: none"><li>- IgE</li><li>- antigen-prezentující buňky (LCs)</li><li>- lymfocyty T (Th2 vs. Th1)</li><li>- žírné buňky, eosinofily, basofily</li><li>- Staphylococcus aureus</li></ul></li></ul> |
| dermatitida    | <ul style="list-style-type: none"><li>- kožní bariera (xeroza)</li><li>- nenasycené mastné kyseliny (GLA)</li></ul>  |
| nervový systém | <ul style="list-style-type: none"><li>- pruritus (neuropetidy)</li><li>- psychická labilita (neurodermitis)</li><li>- autonomní nervová dysbalance (bílý dermografismus)</li></ul>   |

**1990**

**2006**

atopie

- astma, rinokonjunktivitida
- imunita
  - IgE (**pouze 66% AD pacientů**)
  - antigen-prezentující buňky (LCs) (**IDEC, pDCs**)
  - lymfocyty T (Th2 vs. Th1) (**Treg**)
  - **tolernace (probiotika)**
  - žírné buňky, eosinofily, basofily
  - **nespecifická imunita (defensiny, cathelicidiny, TLRs, chemokiny)**
  - Staphylococcus aureus (**Treg**)

dermatitida

- kožní bariera (xeroza) (**ceramidy, fosfolipidy, mastné kyseliny, cholesterol, pH, humidita, profilaggrin, keratohyalin, corneodesmosomy, nespec. imunita**)
- **enzymy (Netherton syndrom LEKTI 1 – anti-proteaza)**
- nenasycené mastné kyseliny (GLA)

nervový systém

- pruritus (neuropeptidy, **neurotrophins NGF, BDNF, NT3, 4/5, 6, 7**)
- psychická labilita (neurodermitis)
- autonomní nervová dysbalance (bílý dermatografismus)

# 4<sup>th</sup> Georg Rajka International Symposium on Atopic Dermatitis Arcachon, France, 15–17 September 2005

Honorary Presidents: G Rajka (Oslo), K Yamamoto (Tokyo)

Chair: A. Taleb (Bordeaux)

Co-chairs: A. Giannetti (Modena), J. Ring (Munich), K. Thestrup Pedersen (Aarhus)

Local Organizing Committee: A. Taleb, F. Boralevi, C. Labrèze (Bordeaux)

Scientific Advisory Board: T Bieber (Bonn), JD Bos (Amsterdam), KD Cooper (Cleveland), M Furue (Fukuoka), G Girolomoni (Verona), J Hanifin (Portland), A Kapp (Hannover), TL Diepgen (Heidelberg), DN Leung (Denver), T Luger (Münster), JF Nicolas (Lyon), AP Oranje (Rotterdam), Y de Prost (Paris), T Reunala (Tampere), JF Stalder (Nantes), M Takigawa (Hamamatsu), K Tamaki (Tokyo), U Wahn (Berlin), HC Williams (Nottingham), B Wüthrich (Zürich)

Scientific Secretariat: F Boralevi, C Labrèze, Pediatric Dermatology Unit, Bordeaux Children's Hospital, France

Website: www.isad2005.org

Wednesday, 14 September 2005: 19.00–21.00: Welcome cocktail

Thursday 15 September 2005

Session 1: Opening/From History To Genetics 8.00–10.30

Opening Session: Chairs: G Rajka & K Yamamoto

Welcome: A Taleb

Session 1: Chairs: J Ring, K Cooper, J Harper

KL1. 8h15–8.45: D Wallach (France): Atopic Dermatitis And Dermatological Doctrines: An Historical Approach

KL2. 8.45–9.15 WOCM Cookson (UK): Genetics And Epigenetics of Atopic Dermatitis

IC1. 9.15–9.35 TL Diepgen (Germany): Worldwide Variation Of Risk Factors In Infants With AD

Oral Communications: Genomics-Epidemiology 9.35–10.30

OC1. Microarray Analysis Of Atopic Skin Lesions. H Sugiyama, T Ebise, T Tazawa, K Tanaka, Y Sugiyama, M. Uehara, K. Kikuchi, T. Kimura

OC2. Gene-expression Profiling of Lesional and Atopy Patched Tested Skin in Patients with Atopic Dermatitis Using cDNA Microarrays. A Sääf, M Bradley, M Tengvall-Linder, HY Chang, C-F Wahlgren, A Scheynius, M Nordenskjöld, PO Brown

OC3. Positional Cloning of a Susceptibility Gene for Childhood Eczema from Chromosome 1q21. P Edser, T Street, M Taylor, J Broxholme, JI Harper, WOC Cookson, MF Moffatt.

OC4. The Links Between Gut Worms, Malaria, and Atopic Dermatitis: A Study in Rural Vietnam. C Flohr

Related Posters:

P1. Epidemiological Characteristics of Atopic Dermatitis in [redacted] Kanwar

P2. Worldwide Changes in the Prevalence of Eczema Symptoms. H Williams, A Stewart, E von Mutius, W Cookson, R Anderson and the ISAAC Study Team.

Session 2: Maturation of the Immune System 11h–13h  
Chairs: K Thestrup Pedersen, T Bieber

KL3. 11.00–11.30 PJ Holt (Australia): Perinatal Maturation of the Immune System: Implications for the Aetiology and Pathogenesis of Atopic Dermatitis and Related Diseases

KL4. 11.30–12.00 E Isolauri (Finland): Gut Microbiota and Atopic Dermatitis

Oral Communications: Immunology I (12.00–13.00)

OC5. Numerical and Functional Abnormality of Circulating Plasmacytoid DC in Atopic Dermatitis. H Hashizume, T Horibe, N Ito, T Ito, M Takigawa.

OC6. The Severity of Atopic Dermatitis Correlates to Thymic Function. H Just, M Deleuran, C Vestergaard, B Deleuran, K Thestrup-Pedersen

OC7. Probiotics Provide Clinical Benefit in Moderate and Severe Atopic Dermatitis: A Randomised Controlled Trial. S Weston, JA Dunstan, J Roper, L Breckler, A Halbert, P Richmond, SL Prescott

OC8. Involvement of Innate Conditioning of Antigen Presenting Cells by *Staphylococcus Aureus* Toxin B in Immune Response of Atopic [redacted] Patients. M Mandron, M-F Aries, F Boralevi F, M Charveron, A Taleb, C Davinche

Related Posters:

P3. Probiotics in the Management of Atopic Dermatitis. JH Y [redacted], M-Y Kim, HO Kim, YM Park

P4. The IgE-Bearing B-Cell Receptor Repertoire of Atopic Dermatitis Patients Shows Unbiased VH-Usage but Patient-Specific Clonal Expansions Regardless of Serum Ige Levels. M Mempel, A Gauger, C Schnopp, J Ring, M Ollert, P Kourilsky, A Lim

Session 3: Infection and Immunity 14.30–16.00

Chairs: JD [redacted] Nicolas, G Imokawa

KL5. 14.30–15.00 D Leung (USA): The Role of Infection in Atopic Dermatitis

IC2. 15.00–15.20 T Werfel (Germany): Inflammatory Reactions To *S. Aureus* in AD

Oral Communications: Immunology II 15.20–16.00

OC9. Th2 Cytokines Down-Regulate Cathelicidin Expression and Increase Skin Susceptibility to Viral Infection in Atopic Dermatitis (AD) Patients. MD Howell, M Boguniewicz, JE Streib, C Wong, RL Gallo, DYM Leung

OC10. Microanalysis of Anti-Microbial Peptide,  $\beta$ Defensin-2, in the Stratum Corneum from Atopic Dermatitis (AD) Patients. S Asano, M Kawashima, Y Ichikawa, G Imokawa

OC11. The Balance Between Langerhans Cells and Inflammatory Dendritic Epidermal Cells as a Regulator of Immunogenic and Tolerogenic Immune Responses in Atopic Eczema. N Novak, J-Pallam, B Schlütter-Böhmer, T Bieber, B Kwiek

Related Poster:

P5. Aberrant Blood Dendritic Cells in Atopic Dermatitis. C Lebre, T van Capel, M Kapsenberg, J Bos, E de Jong

Session 4: Epidermal Inflammation Including Neurogenic Inflammation and Pruritus 16.30–18.30  
Chairs: A Giannetti, T Luger, U Gieler

KL6. 16.30–17.00: B Homey (Germany): Chemokines in AD

IC3. 17.00–17.20 : U Gieler (Germany) Is Atopic Dermatitis a Neurogenic Inflammatory Disease?

IC4. 17.20–17.40: M Takigawa, S Shirahama, T Sakamoto, H Hashizume (Japan): Anxiety and Atopic Dermatitis

Oral Communications: Epidermal/Neurogenic Inflammation 17.40–18.30

OC12. Intracellular Control Of CTACK/CCL27 (Cutaneous T Cell Attracting Chemokine) in Keratinocytes Through the Nuclear Transcription Factor Kappa B (NF- $\kappa$ B). C Vestergaard, C Johansen, K Otikjaer, L Iversen, M Deleuran.

OC13. Brain-Derived Neurotrophic Factor Exerts Immunomodulatory Functions in Atopic Dermatitis. U Raap, A Kapp, B Wedi

OC14. Increased Expression and a Potential Anti-Inflammatory Role of TRAIL in Atopic Dermatitis. E Vasina, M. Leverkus, L [redacted], H-U. Simon and D. Simon

OC15. Graphology and Atopic Dermatitis. C. Gelmetti, G Fabrizi, C Colonna, C Guerriero, P Vizziello, V Tarantino, C. Centofanti and G. Galdo.

Friday 16 September 2005

Session 5: Clinical Research, Prognostic and Severity Markers 8.00–10.30

Chairs: J Hanifin, T David, C Gelmetti

KL7. 8.00–8.30: T Bieber (Germany): A Novel View on the Natural History of Atopic Dermatitis

IC5. 8.30–8.50: P Schmid-Grendelmeier et al (Switzerland): Autoreactivity in Atopic Dermatitis—Induced by Skin Fungi?

Oral Communications: Clinical Research 8.50–10.30

OC16. Expression of Thymic Stromal Lymphopoietin (TSLP) in Keratinocytes of Atopic Dermatitis Patients and Normal Controls. CO Park, WW Hao, JH Lee, KH Lee

OC17. Identification of *Malassezia Sympodialis* in Patients with Atopic Dermatitis: Polymerase Chain Reaction and its Impact on Disease Activity. A Röll, N Juricevic, P Schmid-Grendelmeier

OC18. High Concentrations of Circulating Macrophage Migration Inhibitory Factor in Patients with 'Extrinsic' Atopic Dermatitis. J-S Kim, D-S Yu, J-W Kim

OC19. Elevated Serum Levels of I-309/CCL1 in Patients with Severe Atopic Dermatitis. N Higashi, Y Nimi, Y Kato, S Kawana

OC20. Serum Levels of IL-16 and Disease Activity in Children with Atopic Dermatitis. B Pigozzi, E Tonin, A Belloni Fortina

OC21. Effect of Caring for a Child with Atopic Dermatitis and Asthma on Parental Sleep, Depression and Anxiety Scores: A Prospective Comparative Study. K Moore, TJ David, CS Murray, HF Child, PD Arkwright

OC22. Flare Cycles, Itch-Scratch Loops and Associated Downturns in QoL: The Human and Economic Burden of Atopic Dermatitis on Patients and Caregivers F Turk

## Related Posters:

P6. Comparative Efficacy of Hanifin and Rajka's Criteria and U.K. Working Party's Diagnostic Criteria in Diagnosis of Atopic Dermatitis in a Hospital Setting. A.J. Kanwar

P7. Atopic Dermatitis & The Adolescent Patient. A Taleb on behalf of the ISOLATE study group

Session 6: Animal Models 11.00–12.30  
Chairs: A K [redacted], H de Verneuil

KL8. 11.00–11.30: T Olivry (USA): Canine AD

IC6. 11.30–11.50: P Verzaal, AP Oranje, L van der Fits, P Jäger, P Rensen, L Havekes, E Prens, L Nagelkerken (The Netherlands): Spontaneous Dermatitis in Mice Transgenic for Human Apolipoprotein C1

Oral Communications: Mouse Models 11.50–12.30

OC23. Establishment of a Mouse Model for Atopic Dermatitis: Getting New Insights into the Role of T Cells. A Hennino, J Benetiére, K Rodet, F Berard, M. Vocanson, A-M Schmitt, M-F Aries, JF Nicolas

OC24. Collared Mice: A Model to Assess the Effects of Scratching. S Takeuchi, F Takeuchi, M Furue, SI Katz

OC25. Rapid and Specific Acoustic Analysis of Itch in AD Model Mouse. H Mizutani, K Umeda, K Tokime, Y Omoto

Session 7: Skin Barrier 14.00–16.00  
Chairs: JF [redacted], JIrolomoni

KL9. 14.00–14.30 A. Hovnanian (France): Netherton Syndrome as a Model for Skin Barrier Dysfunction

IC7. 14.30–14.50 JP Hachem (Belgium): Stratum Corneum pH Regulates Permeability Barrier Homeostasis

IC8. 14.50–15.10 M Brattsand, K Stefansson, T Egelrud (Sweden): Kallikreins in the Stratum Corneum

Oral Communications: Skin Barrier 15.10–16.00

OC26. Epicutaneous Sensitization to Aeroallergens in Infantile Atopic Dermatitis: Determining the Role of Epidermal Barrier Impairment. F Boralevi, T Hubiche, C Léauté-Labrèze, E Saubusse, S Maurice-Tison, A Taleb.

OC27. Re-Characterization of the Non-Lesional Skin in Association with Barrier Function and the Severity of Atopic Dermatitis. H Matsuki, K Kiyokane, T Matsuki, S Sato, G Imokawa

OC28. Re-Evaluation of the Importance of Barrier Dysfunction in the Non-Lesional Dry Skin of Atopic Dermatitis: Analysis by Topical Application of a Barrier Cream. T Matsuki, S Sato, H Matsuki, K Kiyokane, G Imokawa,

## Related Posters:

P8. Skin Barrier Damage: Cause or Consequence of Atopic Dermatitis? M.J. Cork, D Robinson, Y Vas A Ferguson, M Moustafa, R Tazi-Ahnnini, SJ Ward

P9. Epidermal Abnormalities Underlying Defect in Netherton Syndrome. P Descargues, S Fraïtag, J Mazereeuw, G Zambruno, C Bo Hovnanian

Session 8: Evidence-Based Therapy, Educational Quality of Life 16.30–18.30  
Chairs: Y de Prost, P Schmid-Grendelmeier, T D

KL10. 16.30–17.00 H Williams (UK): Updating the Systematic Review on Evidence-Based Treatment of Atopic Dermatitis

IC9. 17.00–17.20 T Werfel, U Gieleter (Germany) an man Atopic Dermatitis Intervention Study (GADI) The German Multicenter Trial of Education in At dermatitis.

Oral Communications: Education/Evidence Treatments 17.20–18.00

OC29. Parental Education in the Long-Term Impact in Childhood Atopic Dermatitis. K-B Suhr J-S Yoon, Y-K Kim, M-S Jang, J-H Lee, J-K Park

OC30. An Audit of the Impact of a Consultative Paediatric Dermatology Team on Quality of Life of Infants with Atopic Eczema and Their Families: Validation of the Infants' Dermatitis Quality of Life and Dermatitis Family Impact Score. PE Be Lewis-Jones

OC31. Comparative Trial of Topical Corticosteroid in Atopic Dermatitis. T Uenishi, H Sugiura, T Tanaka,

## Related Posters:

P10. Atopic Dermatitis and Cancer Risk. H Diepgen

P11. Methotrexate Treatment of Atopic Dermatitis. Goujon, N Saad, I Guillot, A Hennino, F Bérard, J

Gala Evening at the "Tir au Vol", Arcachon, France

Saturday 17 September

Session 9: European Task Force on Atopic Dermatitis (ETFAD) Workshop on Allergy Testing in Atopic Dermatitis 8.00–10.00

Chairs: U Darsow, F Rancé, T Werfel

OC32. Atopic Eczema And Malassezia. A (Sweden)

OC33. Studies with Aeroallergen Atopy Patch Tests. U Darsow, J Ring (Germany)

OC34. Food Atopy Patch Test and Repeated Food Challenge. S Seidenari, F Giusti (Italy)

OC35. SAFT and APT Using Fresh Foods in Children with Atopic Dermatitis and Food Allergy. AP Oranje, ACA Devillers, PG Mulder, FB de Waard-van der Spek. (The Netherlands)

OC36. Atopy Patch Test with Foods. K Turjanmaa (Finland)

OC37. The Geneva experience with Epicutaneous Tests 2000–2005 in Atopic Children. J. Lübbe, A. Gikomouzas, A-M. Calza (Switzerland)

OC38. The Labial Food Challenge in Children with Atopic Eczema. F Rancé [redacted]

## Discussion of Related Posters (10.00–10.30)

P12. Is the Labial Food Challenge a Useful Tool in the Management of Food Allergy in Children with Atopic Dermatitis? F Boralevi, T Hubiche, S Roul, C Léauté Labrèze, A Taleb.

P13. The Comparison of Atopy Patch Test with Skin Prick Test in Korean Patients with Atopic Dermatitis. K-B Suhr, Y-S Kim, J-S Yoon, E-J Oh, E-H Lee, J-H Lee, J-K Park

P14. Gene Expression Change of PBMC using IGE (Immune [redacted]ression Chip) by Milk Stimulation Test in Milk Allergy of Atopic Dermatitis. GW Noh, S Choi

P15. Follow-Up Study of 92 Infants with Multiple Food Allergies. K Turjanmaa, A-R Ketvell

P16. Alternaria Alternata Patch Tests on a Study Population of 500 Atopic Dermatitis Patients. F Giusti, S Seidenari

P17. Allergic Sensitization to Common Inhalant Allergens and the Association with Atopic Diseases: Results of a Population Based in Elderly. M. Wolkewitz, D Rotenhäbner, M Löw, C Stegmaier, H Ziegler, H Wang, H Brenner, TL Diepgen

Session 10: New Frontiers in Therapy 11.00–12.30  
Chairs: D Atherton, A Oranje, M Takigawa

KL 11. 11.00–11.30 M Cork (UK): Treatment of Atopic Dermatitis from a Skin Barrier Perspective

Oral Communications: Therapy 11.30–12.30

OC39. What Causes Flares of Atopic Eczema? SM Langan, HC Williams

OC40. Differences in Percutaneous Absorption in Normal and Atopic Dermatitis Skin in Relation to the Molecular Weight. J Jakasa, M Verberk, M Esposito, JD Bos, S Kezic

OC41. N-3/N-6 Polyunsaturated Fatty Acids in a Group of Patients with Recalcitrant Atopic Dermatitis and the Influence of Balanced Japanese Traditional Diet. H Kobayashi, D Tsuruta, M Nanatsue, K Hirai, M Ishii

## Related Posters:

P18. Evaluation of the Corticosteroid-Sparing Effect of an Emollient Milk in a Large Population of Infants Affected by Atopic Dermatitis. M Josse, V Mège-Naudin, V Durosier, V Sibaud, R Grimalt, F Cambazard

P19. Refractory Atopic Dermatitis Associated with Cobalamin Deficiency Treated with a Single B12 Injection. M Nabavi

P20. Does Prolonged Topical Application of Tacrolimus in Children Result in Systemic Accumulation? E Tonin, B Pigozzi and A Belloni Fortina

## Close of Meeting

**Pátek 26. května • Friday May 26th**

Čas • Time

15:00-15:15 **OFICIÁLNÍ ZAHÁJENÍ KONFERENCE**

15:15-15:30 **Úvodní slovo k atopické dermatitidě**  
(MUDr. R. Klubal)

15:30-16:15 **Prof. MUDr. J. Lokaj, CSc**  
*„Kůže - kompartment imunitního systému“*

16:15-17:00 **Prof. MUDr. P. Barták, DrSc**  
*„Langerhansovy buňky a atopická dermatitida“*

17:00-17:45 **Prof. MUDr. H. Tlaskalová-Hogenová, DrSc**  
*„Normální bakteriální flora, alergie a účinky probiotik“*

17:45-18:30 **As. MUDr. Š. Čapková**  
*„Léčba atopického ekzému z pohledu dermatologa“*

18:30-19:15 **Prof. RNDr. V. Hořejší, DrSc,**  
*„Regulační lymfocyty T“*

19:15 **Ukončení přednáškové části 1. dne konference**

19:30 **Odjezd přistaveným autobusem na společnou večeři v pilseněské restauraci Olympia v Praze 1.**



Občanské sdružení pro alergiky,  
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[www.masa.cz](http://www.masa.cz) - [info@masa.cz](mailto:info@masa.cz)

**Sobota 27. května • Saturday, May 27th**

Čas • Time

8:45 **Zahájení 2. dne konference**

9:00-9:30 **MUDr. R. Klubal**  
*„Genetické aspekty atopické dermatitidy“*

9:30-10:00 **Prim. MUDr. N. Benáková**  
*„Diagnostická kritéria pro atopickou dermatitidu“*

10:00-10:30 **Prim. MUDr. V. Gutová**  
*„SCORAD - klinické hodnocení tíže atopické dermatitidy“*

10:30-11:00 **Coffeebreak /káva, čaj, minerálka, chlebičky/**

11:00-11:30 **MUDr. R. Klubal**  
*„Laboratorní vyšetření u atopické dermatitidy“*

11:30-12:00 **MUDr. I. Nentwich, PhD**  
*„Imunologie mateřského mléka“*

12:00-12:30 **Prim. MUDr. M. Fuchs**  
*„Alergie na kravské mléko“*

12:30-13:30 **Oběd /formou bufetového menu vč. nápojů/**

13:30-14:00 **Prof. MUDr. F. Novotný, DrSc**  
*„Balneoterapie - imunomodulační nástroj“*

14:00-14:30 **Prim. MUDr. J. Nebesař**  
*„Význam komplex. Lázeň. léčby dětí - alergiků, astmatiků a ekzematiků“*

14:30-15:00 **D. J. Atherton MA MB BChir FRCP**  
*„Systemic treatment for severe atopic eczema in children“*

15:00-15:30 **Mgr. I. Kudliková/J. Hubert, PhD**  
*„Přehled o roztočích“*

15:30-16:00 **Prof. RNDr. J. Krejsek, DrSc**  
*„Staphylococcus aureus a atopický ekzém“*

16:00-16:30 **MUDr. R. Klubal**  
*„Lymfocyty B, žírné buňky, eosinofily“*

16:30-17:00 **Coffeebreak /káva, čaj, minerálka, koláčky/croisant/**

17:00-17:30 **Prim. MUDr. M. Selerová**  
*„Psychosomatické aspekty atopické dermatitidy“*

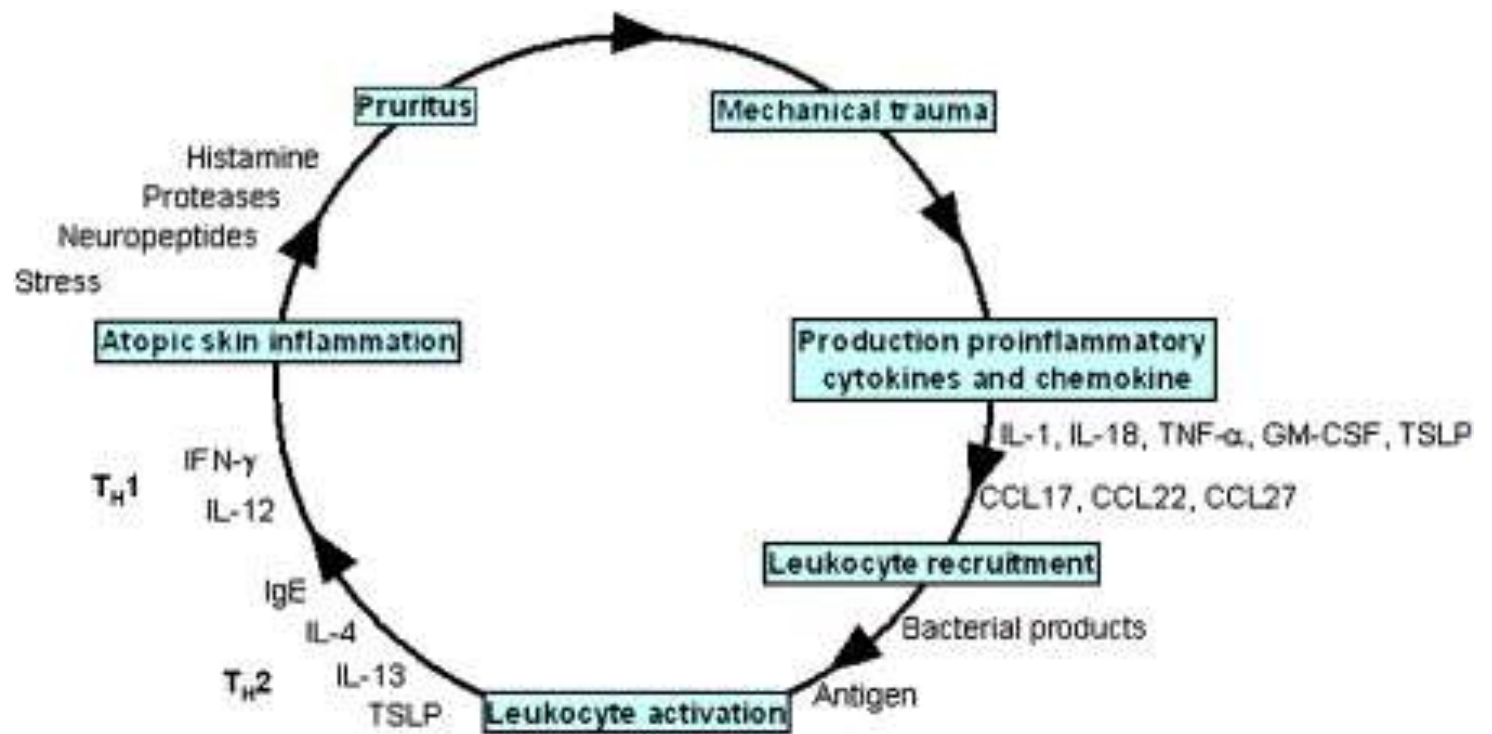
17:30-18:00 **Uwe Gieler**  
*„Atopic Dermatitis - a neurogenic disease?“*

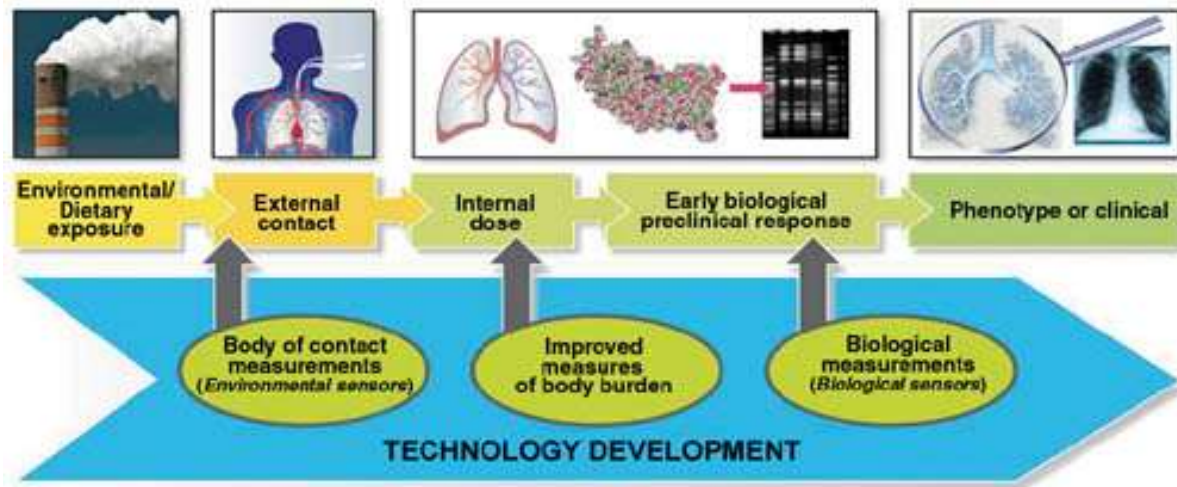
**MUDr. R. Klubal/MUDr. A. Vocilková**  
*„Kosmetické aspekty atopické dermatitidy“*

18:00-18:30 **OFICIÁLNÍ UKONČENÍ KONFERENCE**

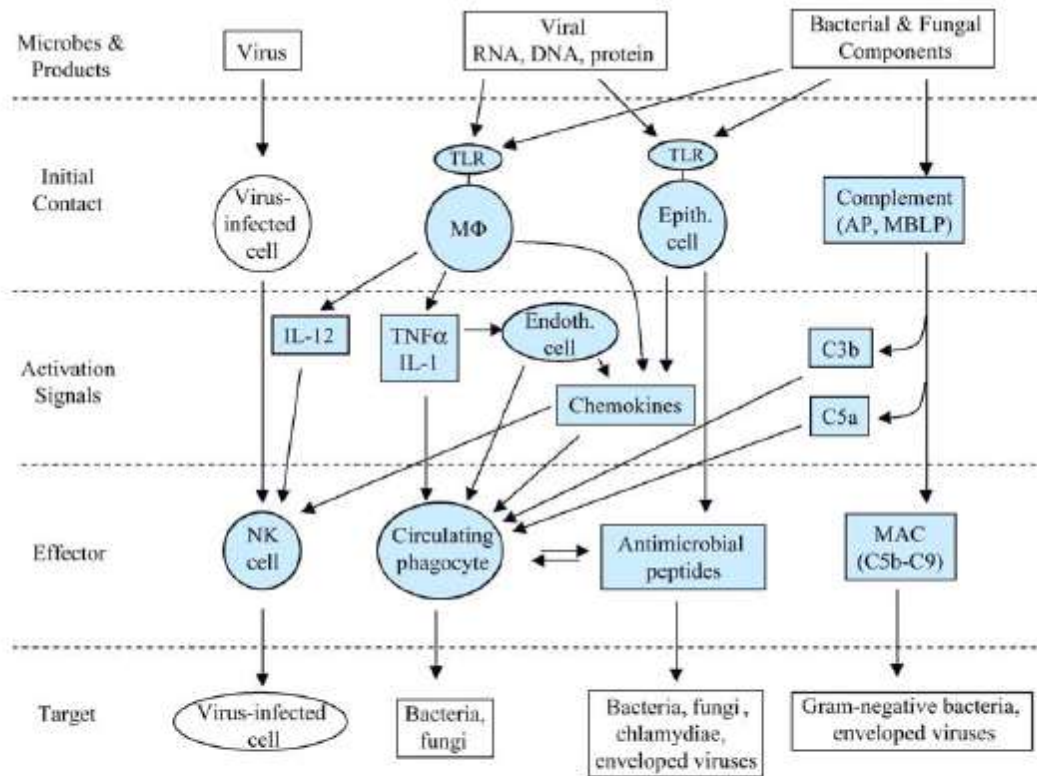
18:45 **Odjezd přistaveným autobusem na koncerty Pražského jara.**

**Časový program přednášek**

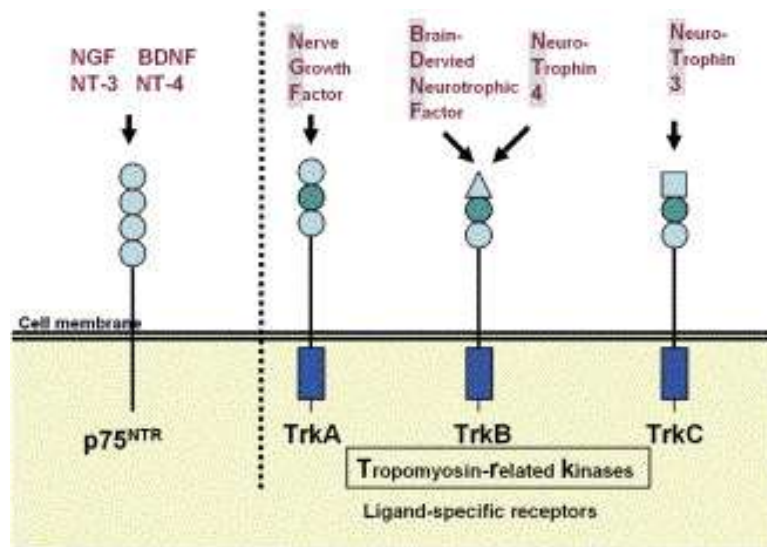






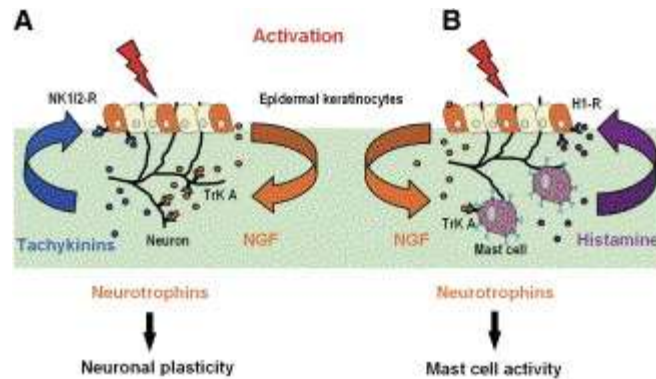
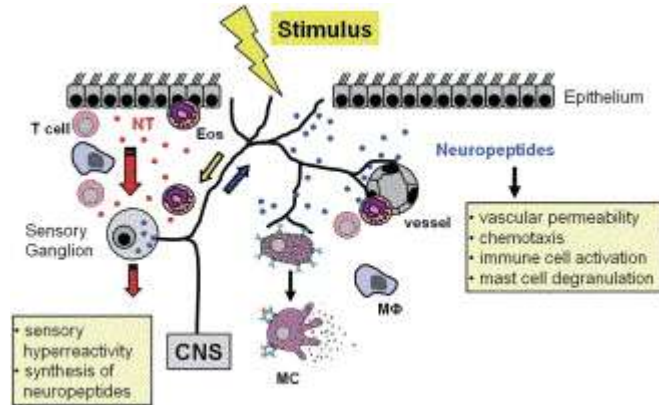
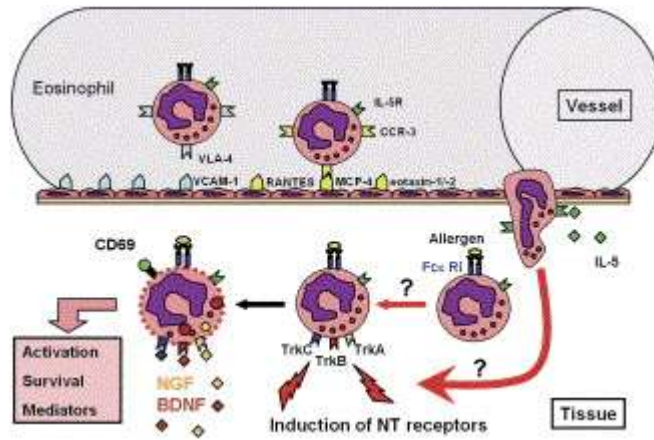


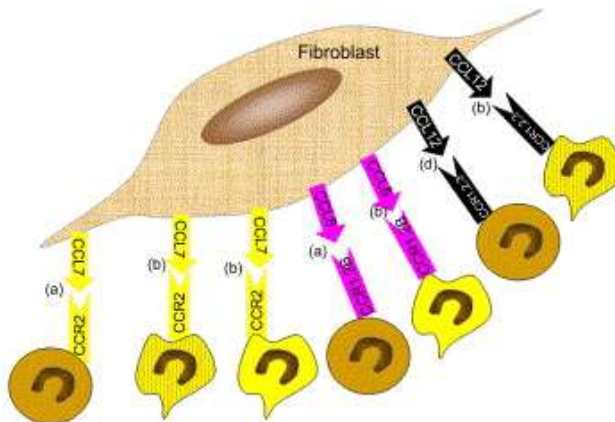
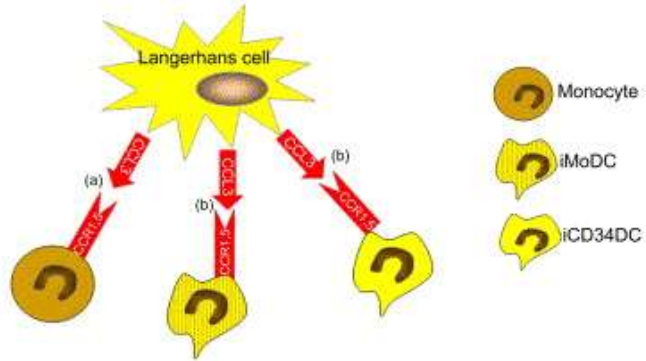
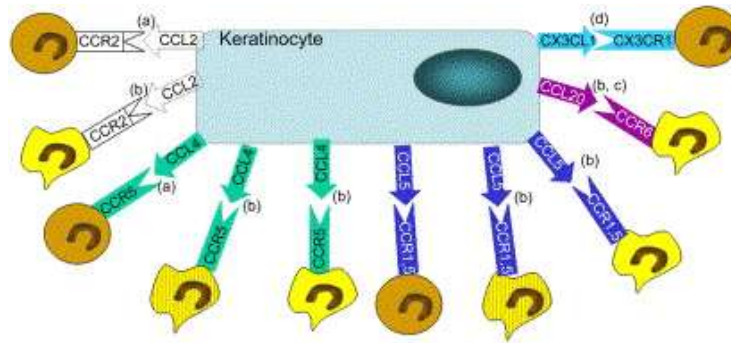
**FIG 1.** Innate immunity: responses to first contact. Diagrammed are important host responses to infection that are independent of specific cell-mediated immunity or antibodies. Initial contact between the host and microbes or their products results in a range of activating signals that mobilize both cellular and humoral effectors for attack on their respective microbial targets. Components of the host response are highlighted in blue. *MΦ*, Macrophages; *AP*, alternative pathway; *MBLP*, mannose-binding lectin pathway.

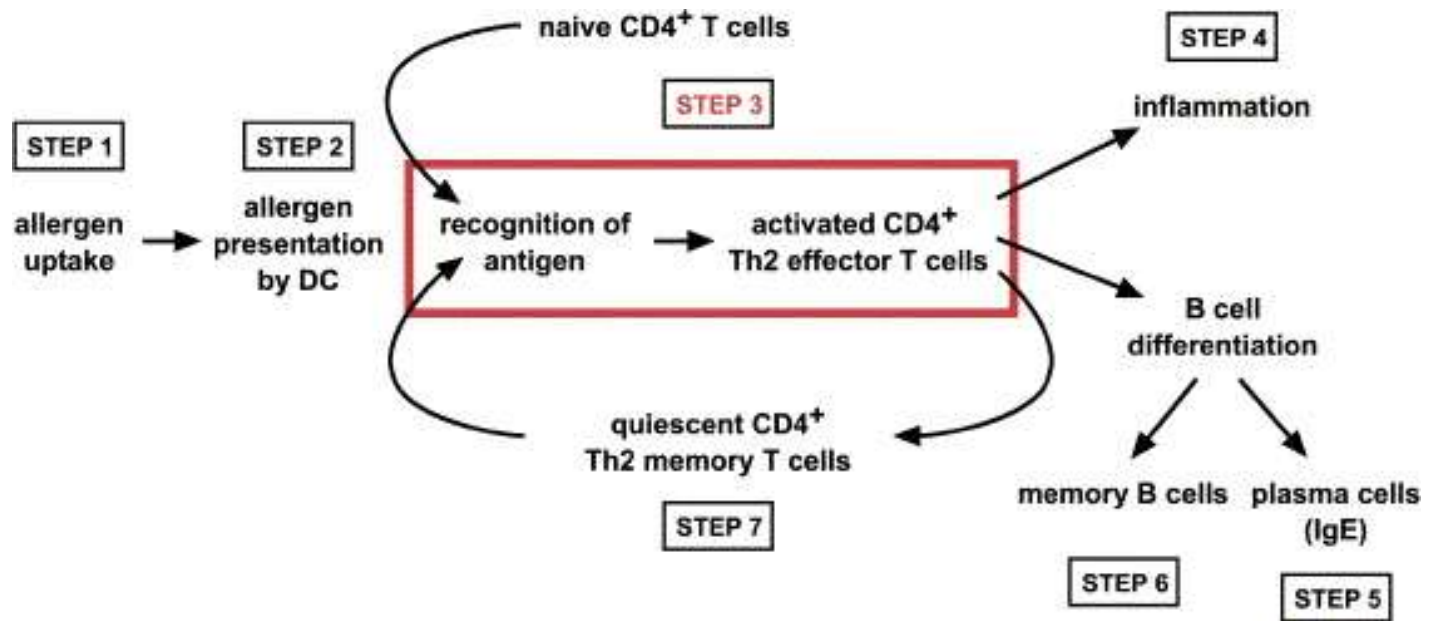


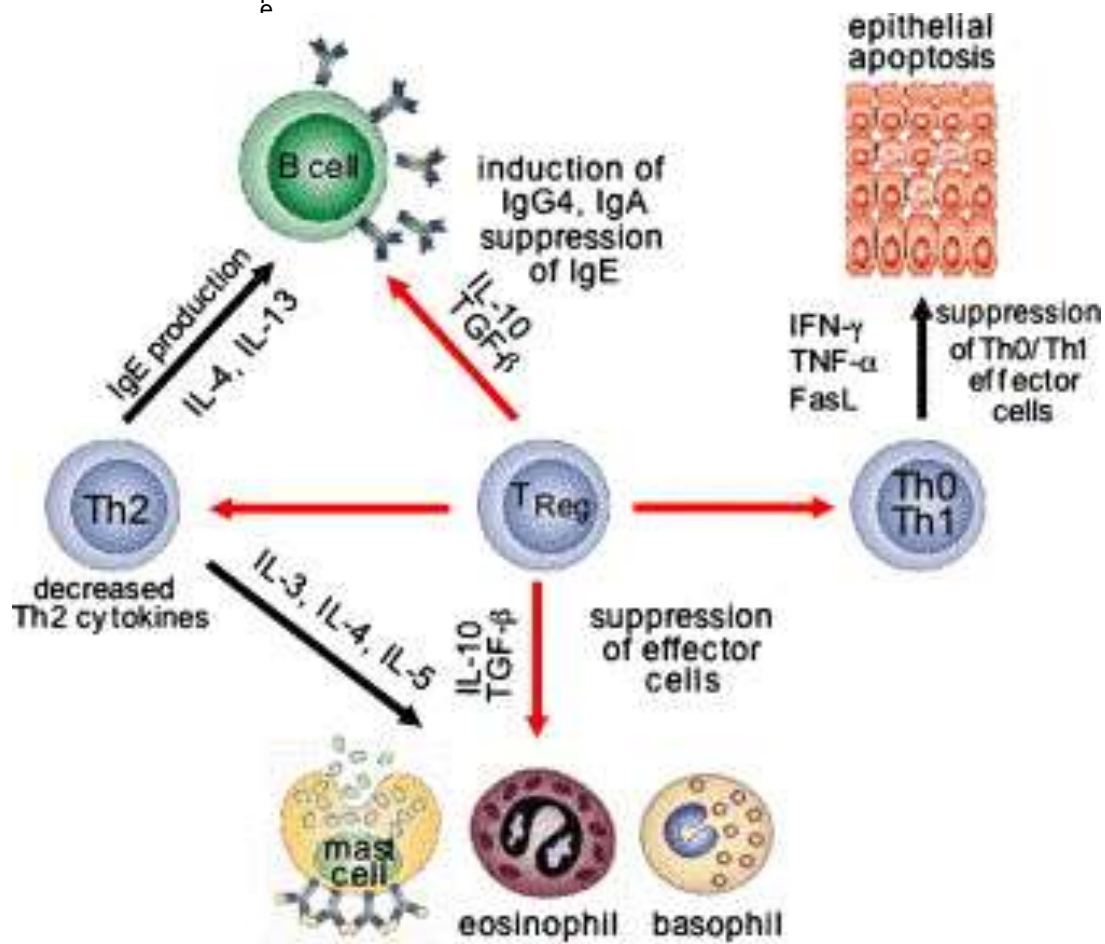
**TABLE I.** Neurotrophins in allergic diseases

Neurotrophin	Allergic disease	Effects and observations
NGF	Asthma	Increased expression in the lung tissue Elevated levels in <ul style="list-style-type: none"> <li>• blood</li> <li>• bronchoalveolar fluid</li> </ul>
	Rhinitis	Enhancement of <ul style="list-style-type: none"> <li>• airway inflammation</li> <li>• neural hyperresponsiveness</li> <li>• early-phase reaction</li> </ul>
	Contact eczema	Elevated levels in nasal fluid
	Atopic dermatitis	Enhancement of neural hyperresponsiveness Nerve fiber sprouting
BDNF	Asthma	Elevated blood levels Elevated levels in <ul style="list-style-type: none"> <li>• bronchoalveolar fluid</li> </ul>
		Correlation of blood levels with airflow limitation Increased expression in airway epithelia
		Enhancement of neural hyperresponsiveness
NT-3	Atopic dermatitis	Elevated blood levels
NT-3	Asthma	Elevated levels in bronchoalveolar fluid
NT-4	Atopic dermatitis	Increased expression in keratinocytes



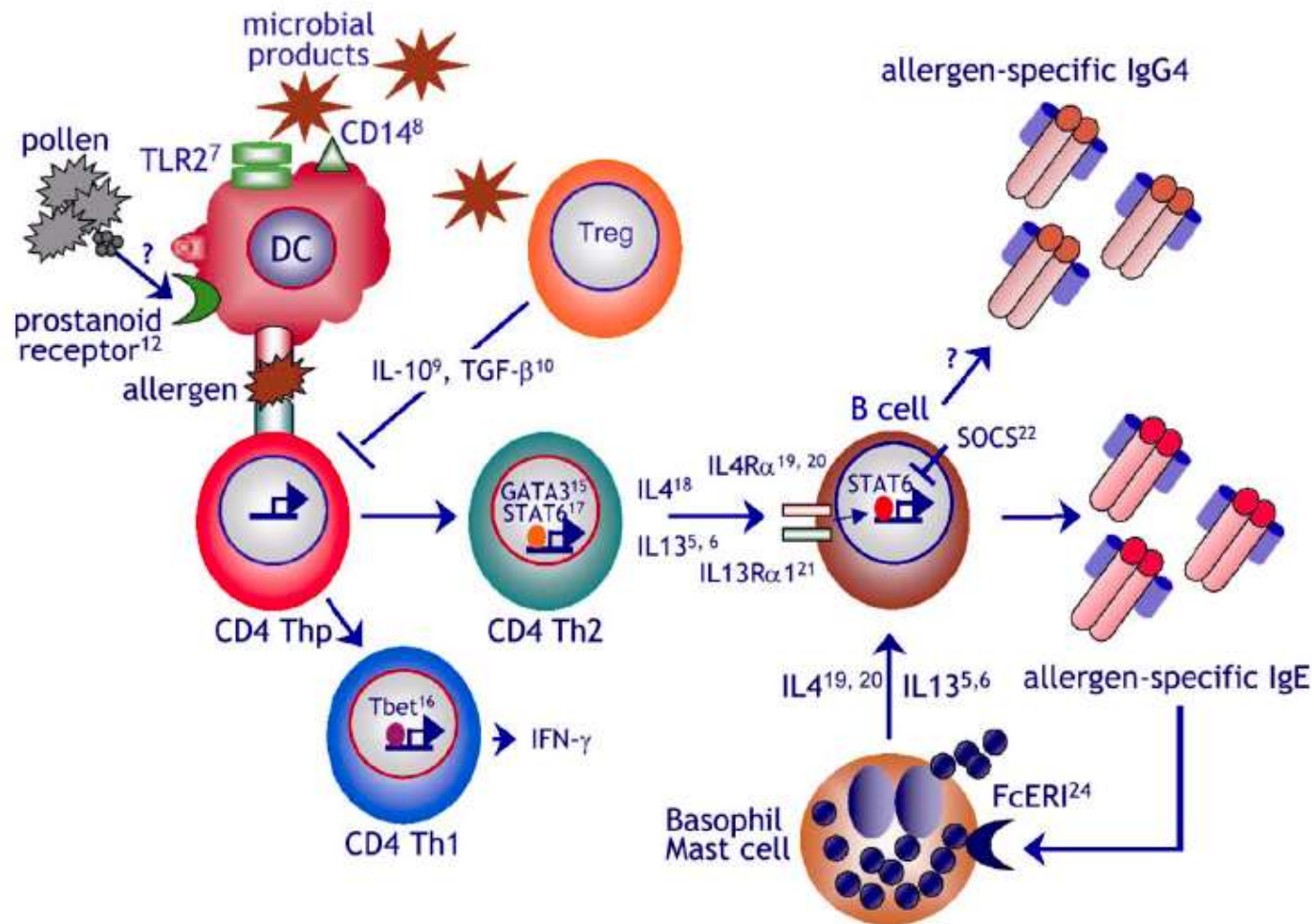






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**FIG 1.** Gene-gene interactions and the pathogenesis of allergic inflammation: a working roadmap. Groups of interactions are color coded: the regulatory and sensing interfaces are in red/orange, T<sub>H</sub> differentiation is in blue/green, and the effector phase is in shades of brown. See text for an in-depth discussion of individual pathways and genes. References are numbered as in the text.

# Absence of T-regulatory cell expression and function in atopic dermatitis skin

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**Background:** The role of regulatory T cells has been widely reported in the suppression of T-cell activation. A dysfunction in CD4<sup>+</sup>CD25<sup>+</sup> T-regulatory cell-specific transcription factor FoxP3 leads to immune dysregulation, polyendocrinopathy, enteropathy X-linked syndrome, often associated with atopic dermatitis. Increasing the number and activity of regulatory T cells in affected organs has been suggested as a remedy in various inflammatory diseases, including allergy.

**Objective:** To determine the presence and function of regulatory T cells in atopic dermatitis.

**Methods:** Immunohistochemistry of lesional atopic dermatitis skin and control skin conditions was used to demonstrate regulatory cells and cytokines *in situ*. The role of effector and regulatory T cells as well as their specific cytokines in apoptosis in human keratinocyte cultures and artificial skin equivalents was investigated.

**Results:** Human T-regulatory type 1 cells, their suppressive cytokines, IL-10 and TGF- $\beta$ , as well as receptors for these cytokines were significantly expressed, whereas CD4<sup>+</sup>CD25<sup>+</sup>FoxP3<sup>+</sup> T-regulatory cells were not found in lesional and atopy patch test atopic dermatitis or psoriasis skin. Both subsets of regulatory T cells suppress the allergen-specific activation of Th1 and Th2 cells. In coculture and artificial skin equivalent experiments, subsets of T-regulatory cells neither induced keratinocyte death nor suppressed apoptosis induced by skin T cells, Th1 cells, IFN- $\gamma$ , or TNF- $\alpha$ .

**Conclusion:** A dysregulation of disease-causing effector T cells is observed in atopic dermatitis lesions, in association with an impaired CD4<sup>+</sup>CD25<sup>+</sup>FoxP3<sup>+</sup> T-cell infiltration, despite the expression of type 1 regulatory cells in the dermis. (*J Allergy Clin Immunol* 2006;117:176-83.)

**Key words:** Regulatory T cell, atopic dermatitis, apoptosis, suppression, regulation, skin, human, inflammation

Atopic dermatitis (AD) is a chronic relapsing skin disorder with an interplay of migrating lymphocytes and

## Abbreviations used

AD: Atopic dermatitis  
APT: Atopy patch test  
FasL: Fas ligand  
HDM: House dust mite  
NAD: Nonallergic type of dermatitis  
Tr1: T-regulatory type 1  
Treg: T-regulatory

epidermal keratinocytes (KC).<sup>1,2</sup> Lesional AD skin is histologically characterized by dermal mononuclear infiltration and spongiosis in the epidermis. At the initial stages of inflammation, Th2 cells migrate to the dermis, where they acquire a Th0/Th1 phenotype under the influence of IL-12, produced by antigen-presenting cells or activated keratinocytes.<sup>3-5</sup> These Th0/Th1 cells are characterized by the expression of Fas ligand (FasL) and secretion of significant amounts of the effector cytokines TNF- $\alpha$  and IFN- $\gamma$ .<sup>2,4,5</sup> The secreted IFN- $\gamma$  induces apoptosis of keratinocytes, leading eventually to the eczematous lesions characteristic of AD.<sup>6,7</sup> In response, keratinocytes upregulate the production of IFN- $\gamma$ -inducible chemokines,<sup>8</sup> which in turn promotes the further infiltration of T cells into the epidermis, thereby augmenting the severity of inflammation and keratinocyte apoptosis.

After their initial discovery in the early 1970s, the concept of T-regulatory (Treg) cell-mediated immune suppression has been extensively explored. Two main groups of Treg cells have been defined. One comprises the natural Treg cells, which are characterized by their CD4<sup>+</sup>CD25<sup>+</sup> phenotype. These cells have been suggested to develop under the control of the transcription factor FoxP3.<sup>9</sup> The other group of Treg cells, the adaptive Treg or T-regulatory type 1 (Tr1), are characterized by the secretion of high levels of IL-10 with or without TGF- $\beta$ .<sup>10-12</sup> They develop in the periphery under the influence of presumably immature dendritic cells<sup>13</sup> and/or the presence of IL-10 and TGF- $\beta$ , but also immunosuppressive drugs like glucocorticoids and vitamin D3,<sup>14</sup> and operate in a cytokine-mediated manner.

Most research on the inhibitory capacities of Treg cells has focused on their ability to suppress proliferation of effector T cells. It has been tempting to speculate that migration of increased numbers of Treg cells to the inflammation area, or the induction of their local proliferation, might be beneficial in the treatment of several

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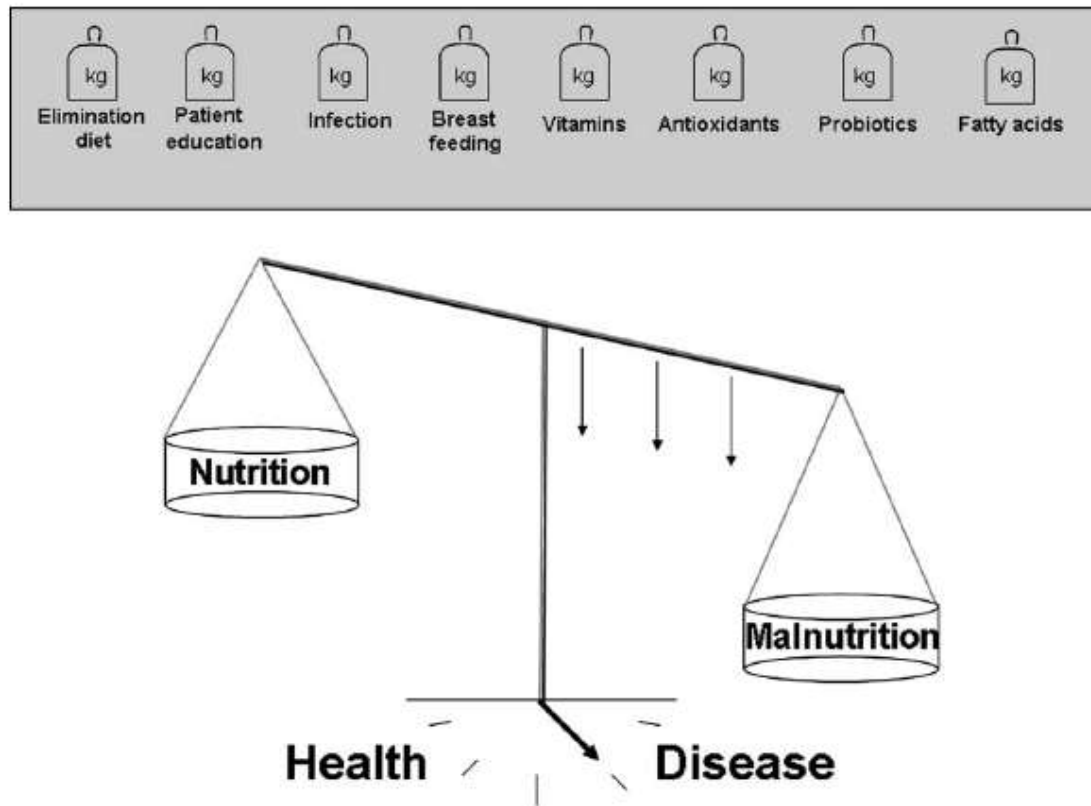
Authors' laboratories supported by Swiss National Science Foundation grants No. 31-105865 and 32-100256 and the Global Allergy and Asthma European Network (GA2LEN).

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0091-6749/52.00

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**FIG 1.** The balance between nutrition and malnutrition and the factors that preponderate on the outcome of health and disease in this interplay are shown.