ISTRUZIONI PER GLI ABSTRACT/ABSTRACTS FORM INSTRUCTIONS

Tutti gli abstract dovranno essere scritti in lingua inglese e rispettare le seguenti indicazioni. / Abstracts must be written in English and structured according to following items.

Gli abstract comprensivi di titolo, autori e testo non dovranno superare le 250 parole o 2000 caratteri.
Abstracts, including title, authors and text, must be limited to 250 words or 2000 characters.

Titolo/Title: Arial, dimensione 12, in grassetto, interlinea singola /Arial, font 12, bold, single line spacing

Autori/Authors: Times New Roman, dimensione 10, interlinea singola - Cognome preceduto dall'iniziale del nome (es. J. Smith) - Sintetica Affiliazione - Località (Città, Paese) /Times New Romans, font 10, single line spacing - The initial of author's first name should be placed before the last name (f.e. J. Smith) – Affiliations - Locations (city, Country)

Testo/ Abstract text: Times New Romans, dimensione 10, interlinea singola. Gli abstract dovranno essere strutturati secondo le quattro categorie: "Introduzione, Materiali e metodi, Risultati e Conclusioni. I riferimenti bibliografici vanno inseriti direttamente nel testo. / Times New Roman, font 10, with single line spacing. Abstracts structured according to four categories: "Background, Methods, Results and Conclusion". References should be included directly in the text.

Gli abstract dovranno essere inviati alla seguente mail: / The abstracts must be sent to:

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ABSTRACT DEADLINE: 10 APRILE 2014/APRIL 10TH 2014

In fine specificare la preferenza tra comunicazione orale o poster. / The indication for oral communication or poster must be reported in the abstract file.

Abstract sample form:

Human adipose derived stem cells (HADSCs) differentiated towards smooth muscle cells (SMCs): a new in vitro model to study CADASIL pathogenesis.

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Introduction: Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy (CADASIL) is a systemic arteriopathy due to Notch3 gene mutations. Clinical features consist in early onset strokes, migraine, vascular dementia, seizures, and psychiatric disorders. Degeneration of vessel SMCs and extracellular accumulation of granular osmiophilic materials (GOMs) are the hallmarks of this disease. CADASIL pathogenesis is still largely unknown and a good experimental model is still missing. We aimed to create and characterize a new in vitro model of CADASIL using HADSCs. Materials and Methods: Five normal subjects and three CADASIL patients underwent a periumbilical fat biopsy. After Collagenase I digestion, HADSCs were extracted from the bioptic samples. The presence of HASCs was verified by the expression of CD13, CD29, and CD90. Then, the HASCs were differentiated toward SMC lineage. The correct differentiation was evaluated by the expression of five markers of SMCs: α smooth muscle actin (ASMA), SM22, calponin, caldesmon, and myosin heavy chain (MHC). Human pulmonary artery smoothed muscle cells (HPASMCs) were used as control of SMC differentiation. Finally, the expressions of the normal and the mutated Notch3 was investigated by western blotting, immunofluorescence and RT-PCR. Results: We were able to collect HADSCs by fat biopsy and to differentiate them towards SMCs. Notch3 expression was demonstrated in SMCs derived by HADSCs and was similar to HPASMCs. Conclusions: Human adipose derived stem cells (HADSCs) differentiated towards smooth muscle cells (SMCs) can be a good model to study CADASIL pathogenesis.

POSTER