

Ludmila Rocnova

Presence of heterozygous ATM deletion may not be critical in the primary response of chronic lymphocytic leukemia cells to fludarabine

Objectives: Abnormalities of the TP53 or ATM, cooperating tumor-suppressor genes, significantly worsen the treatment options for chronic lymphocytic leukemia (CLL) patients. Although the aberrations seem to be mutually exclusive in this leukemia, inactivation of the former gene leads to worse prognosis. **We** tested the in vitro sensitivity of the CLL samples with heterozygous ATM deletion to fludarabine and **the** combination of fludarabine and rituximab; the responses were compared with the TP53-abnormal and wild-type (wt) cells in order to delimitate relative significance of ATM deletion.

Komentář [j1]: Is this team work? If not, it could be rephrased as Vitro... was tested, to emphasise process rather than person.

Methods: In vitro analysis was performed on fifty-nine characterized CLL samples using viability assay WST-1. Western blot and real-time RT-PCR were used to monitor the activation of the ATM/p53 pathway. Results and

Komentář [j2]: It is not common to use sub-headings in an abstract and it may look better if you use paragraph breaks.

Conclusions: At the clinically relevant concentration of fludarabine, TP53-abnormal samples exhibited markedly higher resistance to fludarabine than the remaining CLL samples ($p = 0,012$). **The** cohort with ATM deletion was not more resistant than wt cells. A similar induction of the p53 protein and its downstream target genes PUMA and BAX in ATM-deleted and wt cells, confirmed that the former subgroup has preserved a critical pro-apoptotic response. Proportions of the samples which had been sensitized to fludarabine by rituximab pre-treatment were insignificantly lower ($p = 0.22$) in the TP53-abnormal and ATM-deleted subgroups compared to the wt cases (30%; 29%; 50%, respectively).

Komentář [j3]: Is this conclusions or is it results? Conclusion would talk about teh overall relevance and where this fits in the academic field.

The presence of ATM (11q22-23) deletion in the CLL cells should not be considered an indication of resistance to fludarabine or its combination with rituximab.

Komentář [j4]: This could be developed further to build into a final statement of implications/relevance.

Veronika Krutilova

The role of out-of-pocket payments in post-communist countries of Central and Eastern Europe

The different out-of-pocket payment forms have been introduced in many European countries in last years and recently in some post-communist countries as well. The purpose of out-of-pocket payment implementation is aimed to provide a system to regulate the health care overuse and confront the patient with resource scarcity in health care systems. This paper discusses different forms of out-of-pocket payment forms in the selected post-communist countries and analyses the impact of such payments on health care consumption. Firstly, the out-of-pocket payment mechanisms in 8 countries were described. On the basis of the data derived from the World Health Organisation database the health care use and its changes were followed. Furthermore, these changes were analysed and evaluated at the point of new payment implementation or increase in given payment. As a result, the new payment implementation or its increase caused a drop in health care consumption in all observed countries. However, the decrease was temporary and the consumption increased over a longer period. To conclude, the analysis showed that the out-of-pocket payments regulate the health care use, but it depends on many factors, that have to be followed identified in the health care context of each country context and also over within a longer period as well.

Komentář [j5]: This suggests many. Can you try to quantify this with „various“, „many“, „a small amount“ etc?

Komentář [j6]: While this is the same as „aim“, payments are an inanimate noun and cannot act on their own behalf. We usually reserve „aim“ for things that can control process or action.

Komentář [j7]: This may not be accurate, but is only included as a suggestion to ask whether regulation of overuse is larger than the purpose of the payments, and therefore whether the payments are only a part of the process, rather than the whole.

Komentář [j8]: Would it be inappropriate to list them here?

Komentář [j9]: What process is happening here? It's not clear.

Komentář [j10]: How long?

Jiri Materna

Czech Verbs in FrameNet Semantics

At the present time, no lexical resource of the Czech language, based on the idea of FrameNet, exists. This work presents a method of connecting the valency of Czech verbs in the valency database VerbaLex database to entries into FrameNet frames. While lexical units in FrameNet consist of verbs, nouns, adjectives, adverbs and prepositions, VerbaLex only covers just verb valency possibilities. VerbaLex is directly connected to Czech WordNet (CZWN) in terms of sharing the idea of synsets and using the same verb sense labeling. Verb valencies are realized at two levels -- deep valency, which corresponds to a semantic role (or selectional restrictions) and surface layer, which reflects information about syntactic valencies. This layer is not explicitly expressed in a FrameNet frame, but is annotated in the FrameNet corpus. By linking VerbaLex to FrameNet, we are able to find a nontrivial subset of interlingual FrameNet frames (including their frame-to-frame relations), which could be used as a base for building Czech-FrameNet in Czech. A method of connecting VerbaLex entries to FrameNet frames consists of two phases. The goal of the first phase is to find an appropriate FrameNet frame for each frame in VerbaLex, which requires the identification of corresponding verb translation from Czech to English. As verb meanings in VerbaLex are compatible with CZWN, WordNet is used as an interlanguage. Each Czech verb sense in CZWN is connected to corresponding English senses in Princeton WordNet (PWN) via their synset ID and so the possible translation (with their sense identifiers in PWN) can be easily acquired. Second phase concerns with assigning deep semantic arguments to FrameNet frame elements. The linking is founded on the most probable pairing. FrameNet corpus provides a wide range of frame element realizations. Deep cases in VerbaLex are not exemplified sufficiently but a large enough set of examples can be obtained by taking into account a hyponym relation in CZWN. After joining all hyponyms it is possible to compare this set with frame element realizations and to choose a maximal pairing using Jaccard measure.

Komentář [j11]: This presents an ambiguity in that it could be interpreted as a resource in the Czech Republic, so I have added „language“

Komentář [j12]: Two items or cause and effect (in order to)?

Komentář [j13]: Overall this is quite a dense text and it reads more like an introduction than an abstract. If you are writing it as an abstract, try to reduce the amount of detail and tie it directly to statements on background, method, results, relevance.

Jan Trna

Natural History of Acute Pancreatitis after Cholecystectomy: A Population-based Study

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Background/Aims: In acute pancreatitis (AP), based on i) elevated liver enzymes (\geq threefold increase of alanine aminotransferase or aspartate aminotransferase) on day 1 and ii) presence of gallstones/sludge in gallbladder ~~one can categorize~~ patients can be categorized into 4 Groups: A (i + ii), B (i but not ii), C (ii but not i) and D (neither i nor ii). In a population-based study we determined recurrence rates after cholecystectomy in these four groups of patients.

Methods: We retrospectively abstracted data from medical records of all Olmsted county residents who suffered from AP and were treated at Mayo Clinic between 1990 and 2005 (n= 1049). After excluding patients with possible etiologies for recurrence (alcohol abuse, elevated serum calcium/triglycerides) we identified 239 patients who received cholecystectomy as a part of treatment of AP and we determined recurrence rates of AP in these patients ~~classified into~~ groups A –D.

Results: The median duration of follow-up after cholecystectomy was 99 months (range 8 -220). AP recurred in 13/142 (9.2%) in Group A, 1/17 (5.9%) in Group B, 13/57 (22.8%) in Group C and 14/23 (60.9%) in Group D. Recurrences were higher in group D versus all other groups (**p** -) and Group C versus Group A and group B (**p** -). No difference was seen in recurrence rates in Group A vs Group B (**p** -).

Conclusion: In AP associated with elevated liver enzymes recurrence rates are low after cholecystectomy. However, cholecystectomy fails to prevent recurrence in AP without such laboratory abnormalities, especially in those

without gallbladder stones/sludge. Our results do not support the recommendation for cholecystectomy in idiopathic pancreatitis.

Note: the statistics is missing – not calculated yet...

Jan Cech

Introduction of paper: The Influence of Electrode's Gap Width on Plasma Properties of Diffuse Coplanar Surface Barrier Discharge in Nitrogen

Fast in-line plasma treatment of fabrics or large area substrates is currently of great importance in industry nowadays. The utilization of different types of dielectric barrier discharges (DBD) operated at atmospheric pressure [1] for these applications has been conducted made with different levels of success. The main problem in of processing of substrates in most of DBD configurations stands is the inhomogeneity of DBD at atmospheric pressure (formation of plasma microchannels). This results in inhomogeneous treatment of the substrates and unintentional pin-holing of the substrates at high power densities that are necessary for rapid treatment.

These drawbacks are reduced in the diffuse coplanar surface barrier discharge (DCSBD), where plasma is generated in thin layers above the dielectric surface of dielectric and plasma microchannels are oriented parallel to the dielectric surface. Due to the small distance between electrodes, the microchannel part of the discharge can be suppressed in order to increase the homogeneity of the treatment and suppress the pin-hole effects. Furthermore, the plasma microchannels of DCSBD move rapidly along the surface, which improves the homogeneity of the treatment [2,3].

For better utilization of the DCSBD for industrial purposes, the influence of outer physical conditions and discharge geometry on the plasma parameters has to be studied. In this paper the influence of electrode gap width on the plasma parameters of DCSBD was studied. Using spatially resolved spectroscopy, 1D-spatial profiles of vibrational and rotational temperatures, calculated from the second positive system of nitrogen were determined and correlated with intensity profile of the second positive system of nitrogen. Time-space maps of intensities of the second positive system of nitrogen (SPS - 377.1 nm) and the first negative system of nitrogen (FNS -

Komentář [j14]: Very focused. Has this been team edited in advance? My only question would whether it should have sub headings, but if this is expected as an editorial style for a journal or reserch community, it is OK.

Komentář [j15]: Is this a noun compound? If it is, remove the final „s“ from configurations.

Naformátováno: Odsazení: První řádek: 0.49"

Komentář [j16]: This is a fairly casual statement, where a more critical processing verb could be used. You could also provide a justification „...in order to...“

Komentář [j17]: Repetitive. Can you blend the flow of the last two sentences, to make this an outcome of the first. Keep it as two sentences though.

Komentář [j18]: Long sentences need careful punctuation.

391.5 nm) were also estimated. In addition to the optical measurements the influence of electrode gap width and input voltage frequency on the ignition and extinction voltages of DCSBD was investigated.