

**VII Kongres farmaceuta Srbije**

**VII Serbian Congress of Pharmacy**

**Sesija 12/Session 12**

Petak 12.10./ Friday 12th October 2018, Crowne Plaza Hotel, Belgrade, Serbia

**Donošenje odluka u zdravstvu iz farmakoekonomske perspektive**

**Health care decision making from the pharmacoeconomic perspective**

Predsedavajući/Chairs: Tanja Novaković, Wija Oortwijn

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| **8:30 – 9:00** | **VALUE FRAMEWORKS AND DECISION MAKING AROUND THE GLOBE**  Wija Oortwijn  Radboud University Medical Centre (Radboudumc), Nijmegen, The Netherlands |
| **9:00 – 9:20** | **Vrednost inovacije prilikom donošenja odluka u zdravstvu**  **The Value of Innovation in Health Care Decision Making**  Tanja Novaković  Sekcija za farmakoekonomiju SFUS, ZEM Solutions, Beograd (Srbija)  Pharmacoeconomics Section SFUS, ZEM Solutions, Belgrade (Serbia) |
| **9:20 – 9:40** | **ZAŠTO SISTEMATIČNI PREGLEDI LITERATURE?**  **WHY SISTEMATYC REVIEWS?**  Mark Parker  ZEM Solutions, Belgrade (Serbia) |
| **9:40 - 10:00** | **INHIBITORI KOTRANSPORTERA ZA NATRIJUM I GLUKOZU TIPA 2 KOD OBOLELIH OD DIJABETES MELITUSA TIPA 2 I SRČANE INSUFICIJENCIJE: KLINČKI POGLED NA TERAPIJU KOJA MOŽE DA SNIZI MORBIDITET I MORTALITET SODIUM GLUCOSE CONTRANSPORTER-2 INHIBITORS IN TYPE-2 DIABETES AND HEART FAILURE: THE CLINICAL STANDPOINT ON TREATMENT THAT CAN REDUCE MORBIDITY AND MORTALITY**  Marija Polovina  Klinika za kardiologiju Kliničkog centra Srbije, Univerzitet u Beogradu-Medicinski fakultet (Srbija)/Department of Cardiology, Clinical Center of Serbia, University of Belgrade – Faculty of Medicine (Serbia) |
| **10:00 – 10:15** | **UTICAJ PRAVILNIKA KOJIM SE REGULIŠU MAKSIMALNE VELEPRODAJNE CIJENE LEKOVA NA CIJENE LIJEKOVA U BOSNI I HERCEGOVINI**  **INFLUENCE OF THE RULEBOOK FOR REGULATING MAXIMUM WHOLESALE PRICES ON MEDICINE COST IN BOSNIA AND HERCEGOVINA**  Biljana Tubić  Agencija za lijekove i medicinska sredstva Bosne i Hercegovine (Bosna i Hercegovina)  Agency for Medicinal Products and Medical Devices of Bosnia and Herzegovina (Bosnia and Herzegovina) |
| **10:15 - 11:30** | **Diskusija/Discussion** |

**ABSTRAKTi/ABSTRACTS**

**VALUE FRAMEWORKS AND DECISION MAKING AROUND THE GLOBE**

Wija Oortwijn, Rob Baltussen, Maarten Janssen

Health technology assessment (HTA) practices all employ so-called value frameworks for priority setting, i.e. making recommendations and/or reimbursement decisions regarding new health technologies. This includes a judgment on the relative importance of certain assessment criteria, such as clinical benefit and the incremental cost-effectiveness of (new) health technologies.

Some HTA practices focus on the development and use of evidence (e.g. Argentina), while others explicitly combine the use of evidence with procedural aspects, involving relevant stakeholders (e.g. the Netherlands). Although the practical application of a value framework is context-dependent, it is important to note that the underlying design has implications for the way in which priorities are set. Currently, some value frameworks may seriously comprise the legitimacy of reimbursement decisions. This indicates the need but also potential to improve HTA practices.

A way forward are evidence-informed deliberative processes (EDPs). EDPs is a new conceptual framework based on two validated frameworks, multi-criteria decision analysis and the Accountability for Reasonableness framework. EDPs provides a practical tool for HTA agencies aiming to set priorities regarding what is relevant and meaningful from a broader health system’s perspective. It includes several steps related to the HTA process (scoping, assessment, appraisal, dissemination). These steps should not be considered as a blueprint but rather as an aspirational goal – organizations can take incremental steps. We will present the steps to undertake EDPs, substantiated with real world examples to enhance legitimate decision-making.

EDPs can facilitate democratic decision-making in various ways. It supports organizations to be more systematic, explicit and transparent, by making recommendations/decisions sensitive to a wider range of needs and values, and by promoting consistency across decisions.

**VREDNOST INOVACIJE PRILIKOM DONOŠENJA ODLUKA**

Tanja Novaković

Pružaoci zdravstvene zaštite u Centralno Istočnoj Evropi su suočeni sa nizom izazova koji se javljaju usled sve većeg broja zahteva i rastućih očekivanja. Kao i kod mnogih zdravstvenih sistema širom sveta, neophodno je da se poboljša pristup inovativnim tehnologijama u okviru sve ograničenijih budžeta. Ograničeno donošenje odluka i kašnjenje u procesu procene novih tehnologija mogu imati značajan uticaj na zdravlje pacijenata.

**ABSTRAKTi/ABSTRACTS**

Inovacije mogu dovesti do povećane potrošnje u zdravstvenoj zaštiti kao rezultat supstitucije terapija sa nižom cenom novim tehnologijama čija je cena viša, efektima komplementarnosti, tj. novim i starim proizvodima koji se koriste istovremeno, i pružanjem terapije za bolesti za koje prethodno nisu bile dostupne terapije. Da bi se postigla finansijska stabilnost, potrebno je odgovoriti na dva ključna izazova. Prvi je odlučivanje o nivou raspoloživih resursa; drugi, osigurati optimalnu alokaciju resursa unutar ograničenih budžeta. Da bi bili relevantni za donošenje odluka u regionu CEE, vlade i HTA agencije moraju se baviti ovim ključnim izazovima.

Nakon nekoliko godina ograničenog odlučivanja u Srbiji i zaustavljenih rasprava postavlja se pitanje da li je budžet važniji od spašavanja i unapređenja kvaliteta života pacijenata?

**THE VALUE OF INNOVATION IN DECISION MAKING**

Tanja Novaković

Central and Eastern European health care providers are faced with a number of challenges as a result of increased demand and rising expectations. As with many health systems across the world improving access to innovative technologies within increasingly constrained budgets is required. Limited decision-making and delays in evaluations of new technologies may have a significant health impact on patients.

Innovations can drive increased spending in health care as a result of substitution of lower priced products with new higher priced technologies, complementarity effects, i.e. new and old products used concurrently, and by providing treatments for conditions for which previously no treatments were available. To achieve financial stability, two key challenges need addressing. Firstly, deciding on the level of available resources; secondly, ensuring optimal resource allocation within finite budgets. To be relevant to decision making in the CEE region, governments and HTA agencies must address these key challenges.

After several years of limited decision making in Serbia and stalled discussions at what point is budget more important than saving and improving lives?

**ZAŠTO SISTEMATIČNI PREGLEDI LITERATURE?**

Mark Parker

Randomizovane kontrolisane studije predstavljaju zlatni standard u definisanju kliničkih dokaza lečenja. Ove studije su dizajnirane da minimiziraju različite vrste pristrasnosti i druge probleme koji prate procenu kliničkog benefita. Međutim, ovakve studije su ograničene vremenom i prostorom, dosta je skupo da se realizuju.

**ABSTRAKTi/ABSTRACTS**

Klinička praksa, tzv.”real word” je mnogo komplikovaniji od onog predstavljenog u studiji. Trenutna tehnološka dostignuća su dovela do eksplozije dostupnih dokaza koji su prikupljeni iz realnog života, iz bolnica i opšte prakse, i specifičnih registara pacijenata koji sadrže mnoštvo podataka o nizu terapija i primera iz prakse. Iako su ovi podaci značajni da se omogući znanje o pružanju zdravstvene zaštite, sposobnost obrade ovih podataka je još uvek u povoju. Cilj ovog predavanja je da se pomoću inovativnog alata koji predstavlja analizu “velikih podataka” medicinske naučne literature pod originalnim nazivom *Publication Ocean*, pokažu problemi i rešenja izazova koji prate medicinu zasnovanu na dokazima (engl. Evidence based medicines - EBM).

Pristup informacijama baziranim na dokazima je ključno za donošenje odluka koje koriste koristi (benefite) tehnologije da bi se postigla njena najbolja vrednost za određeno zdravstveno stanje i efikasan i kvalitetan zdravstveni sistem.

**WHY SISTEMATYC REVIEWS?**

 Mark Parker

Randomised controlled trials represent the gold standard in defining clinical evidence for treatments. These trials are designed to minimise the various biases and other problems which accompany an assessment of clinical benefit. However, such trials are limited in time and place, extremely expensive to conduct and the real world is infinitely more complicated than is represented by the trials. Recent advancements in technology have resulted in an explosion of available evidence collected in real world settings, from hospital and general practice, to specific patient registries collecting a wealth of data on a range of treatments and practices. While this evidence is vital to support our knowledge of healthcare delivery, the ability to analyse it is still in its infancy. The goal of this lecture is to demonstrate problems and solutions to the challenges of evidence-based medicine (EBM) with the innovative tool „Publication Ocean“ which presents Big Data analytics of the Medical scientific literatue. Access to evidence-based information is crucial for making decisions using the benefits of technology in order to achieve its best value for a particular health condition and in that way to achieve an efficient and qualitative health care system.

**ABSTRAKTi/ABSTRACTS**

**INHIBITORI KOTRANSPORTERA ZA NATRIJUM I GLUKOZU TIPA 2 KOD OBOLELIH OD DIJABETES MELITUSA TIPA 2 I SRČANE INSUFICIJENCIJE: KLINČKI POGLED NA TERAPIJU KOJA MOŽE DA SNIZI MORBIDITET I MORTALITET**

Marija Polovina

Srčana insuficijencija trenutno pogađa oko 26 miliona obolelih u svetu. Očekuje se povećanje prevalencije usled starenja populacije i boljeg peživljavanja pacijenata sa predisponirajućim kardiovaskularnim oboljenjima. Preživljavanje obolelih od srčane insuficijencije je značajno skraćeno bez odgovarajućeg lečenja, a ponovljene hospitalizacije predstavljaju značajno socio-ekonomsko opterećenje.

Savremeno farmakološko lečenje srčane insuficijencije može u značajnoj meri da smanji morbiditet i moratalitet obolelih. Primarni cilj lečenja srčane insuficijencije uključuje kontrolu simptoma, smanjenje učestalosti hospitalizacije i sniženje mortaliteta. Terapijske opcije se razlikuju zavisno od fenotipa srčane insuficijencije. U srčanoj insuficijenciji sa sniženom ejekcionom frakcijom inhibicijom prekomerne neurohormonalne aktivnosti beta-blokatorima, inhibitorima angiotenzin-konvertujućeg enzima, antagonistima angiotenzinskih i mineralokorikoidnih receptora postiže se značajno poboljšsanje ishoda.

U skorije vreme postignuto je dodatno poboljšsanje preživljavanja dodatkom nekoliko novih lekova na optimalnu terapiju srčane insuficijencije. Ivabradin i  angiotenzin receptor – neprilizin inhibitor dodatno smanjuju rizik od hospitalizacije i kardio vaskularni moratilitet za 18 do 20%. Nasuprot tome, za sada ni jedan lek ne poboljšava preživljavanje obolelih od srčane insuficijencije sa očuvanom ejekcionom frakcijom ali kod ovih bolesnika hospitalizacija i mortalitet su u značajnoj meri povezani sa komorbiditetima. U tom kontekstu kliničke studije koje su uključile i ove pacijente pokazale su da lečenje dijabetesa primenom blokatora kotransportera za natrijum i glukozu snižava rizik od hospitalizacije za 30%. Slično,  direktni oralni antikoagulansi snižavaju rizik od tromboembolizma i morataliteta u atrijalnoj fibrilaciji bez interakcije sa srčanom insuficijencijom (oba fenotipa).

Zaključak: srčana insuficijencija predstavlja rasući javno–zdravstveni problem, a njeno lečenje primenom novih lekova može da poboljša preživljavanje.  Iz kliničke perspektive, važno je revidirati politiku participacije kako bi novi lekovi koji mogu da spasu živote postali dostupni većini obolelih.

**ABSTRAKTi/ABSTRACTS**

**SODIUM GLUCOSE CONTRANSPORTER-2 INHIBITORS IN TYPE-2 DIABETES AND HEART FAILURE: THE CLINICAL STANDPOINT ON TREATMENT THAT CAN REDUCE MORBIDITY AND MORTALITY**

Marija Polovina

Heart failure (HF) currently affects ~26 million patients worldwide and its prevalence is expected to increase with the aging population and improved survival of patients with predisposing cardiovascular disorders. HF prognosis is poor without adequate treatment, and

repeated hospitalizations impose a substantial socio-economic burden. Modern, evidence-based HF management, including pharmacological and device therapy have substantially decrease morbidity and mortality.

The fundamental objectives of HF management include controlling the symptoms, reducing the frequency of hospitalization, and decreasing mortality. Treatment options differ with respect to the HF phenotype. For patients with HF and reduced ejection fraction (HFrEF), inhibition of neurohormonal overactivity with beta-blockers, angiotensin converting enzyme inhibitors, angiotensin receptor blockers, mineralocorticoid receptor antagonists, has a proven ability to improve outcomes. Recently, incremental survival benefit has been demonstrated with the addition of several novel medications to an optimized HF treatment. Ivabradine and angiotensin receptor-neprilysin inhibitor have been shown to reduce the risk for HF hospitalization and cardiovascular mortality by 18% and 20%, respectively. Conversely, there is no treatment for HF with preserved ejection fraction (HFpEF) that could improve survival, but in HFpEF, causes of hospitalization and mortality are frequently non-cardiovascular and related to comorbidities. In this context, clinical trials that have included HFpEF patients have shown that treatment of diabetes with sodium glucose cotransporter-2 inhibitors could decrease the risk of HF hospitalization by ~30%. Likewise, non-vitamin K oral anticoagulant medications have been shown to reduce the risk of thromboembolism and mortality in atrial fibrillation and there was no interaction with HF (both HFrEF and HFpEF).

In conclusion, HF is a growing public-health concern and its treatment with novel medications can improve survival. From the clinical perspective, it is of great importance that reimbursement policies be revised so that these life-saving medications could be offered to the majority of the affected patients.

**ABSTRAKTi/ABSTRACTS**

**UTICAJ PRAVILNIKA KOJIM SE REGULIŠU MAKSIMALNE VELEPRODAJNE CIJENE LEKOVA NA CIJENE LIJEKOVA U BOSNI I HERCEGOVINI**

Biljana Tubić, Jelena Aničić, Tijana Spasojević, Ana Cvijanović, Aleksandar Zolak

Bosna i Hercegovina je u 2017. godini prvi put implementirala podzakonski akt kojim se reguluše nivo maksimalnih veleprodajnih cijena lijekova. Cilj rada je ocjeniti prve rezultate uticaja Pravilnika na nivo veleprodajnih cijena lijekova na tržištu Bosne i Hercegovine.

Upoređene su veleprodajne cijene lijekova za 2016. godinu kada Pravilnik nije postojao u odnosu na 2017. godinu kada je Pravilnik prvi put implementiran. Izvori veleprodajnih cijena lijekova bili su podaci dobijeni od velprometnika za godišnje izvještaje o potrošnji lijekova koje naša agencija publikuje svake godine na svojoj internet prezentaciji www.almbih.gov.ba.

Ukupna sredstva izdvojena za lijekove u 2017. godini niža su u odnosu na 2016. godinu. Takođe, veleprodajne cijene lijekova koji se izdaju na recept ljekara niže su u 2017. godini u odnosu na 2016. godinu. S druge strane, može se vidjeti da su veleprodajne cijene lijekova koji se izdaju bez ljekarskog recepta (OTC lijekovi) više u 2017. u odnosu na iste u 2016.

Međutim, ovi bezreceptni lijekovi čine samo 15 % tržišta lijekova, tako da to navedeno nije imalo uticaj na ukupna finansijska sredstva izdvojena na lijekove u 2017. godini u Bosni i Hercegovini. Implementacija Pravilnika i uvođenje sistema maksimalnih veleprodajnih cijena lijekova ima pozitivan uticaj na budžet fondova zdravstvenog osiguranja u Bosni i Hercegovini.

**INFLUENCE OF THE RULEBOOK FOR REGULATING MAXIMUM WHOLESALE PRICES ON MEDICINE COST IN BOSNIA AND HERCEGOVINA**

Biljana Tubić, Jelena Aničić, Tijana Spasojević, Ana Cvijanović, Aleksandar Zolak

Bosnia and Herzegovina have implemented rulebook for regulating maximum wholesale prices at the first time in 2017. The aim of this study was to assess the first results of the influence of the rulebook on the level of wholesale prices of medicines on the market of Bosnia and Herzegovina.

Medicine prices in the years 2017 and 2016 were analyzed. The level of wholesale prices in 2016, when rulebook has not existed, were compared with wholesale prices of medicines in 2017 when rulebook was implemented for the first time.

**ABSTRAKTi/ABSTRACTS**

The wholesale prices of medicines were data obtained from wholesalers which we collect every year for Annual reports about the distribution of medicines in Bosnia and Herzegovina and which are published on website www.almbih.gov.ba by our agency.

The total financial expenses for medicines were reduced in 2017 compared to 2016. Also, it was

shown that the wholesale prices of Rx medicines are decreased compared with 2016. On the other side, it could be seen that OTC medicines have increased prices in 2017 as compared with the year 2016. But, OTC medicines make 15 % of the whole market of medicines and this increase did not have the influence on financial cost in all. Implementation of the Rulebook and system of maximal wholesale prices of Rx medicines has positive influence on budget of fonds for healthcare insurance in Bosnia and Herzegovina.

**BIOGRAFIJE/BIOGRAPHIES**

***Wija Oortwijn***

Wija Oortwijn is affiliated with Radboud University Medical Centre Nijmegen, Department for Health Evidence (the Netherlands). She studied health sciences and holds a PhD in Medicine (Priority setting for Health Technology Assessment - HTA).

She has more than 25 years of relevant professional experience in HTA and health policy analysis. She led studies on mapping the level of HTA in countries around the globe and was involved in the research project INTEGRATE-HTA ([www.integrate-hta.eu](http://www.integrate-hta.eu)), aimed to develop concepts and methods to enable patient-centred, integrated assessments of the effectiveness, and the economic, social, cultural, and ethical issues of complex technologies that take context and implementation issues into account. Recently, she concluded a project on improving HTA and decision-making in 10 selected countries around the globe (published in Value in Health), and a project to describe the extent to which HTA is aligned with values and principles that underpin the health system in a selection of countries. Currently, she is developing a practical guide for HTA organizations regarding the implementation of ‘evidence-informed deliberative processes’ (EDPs). EDPs provide guidance to HTA organizations to improve their processes towards more legitimate decision-making. EDPs is based on rational decision-making through evidence-informed evaluation of identified values (as reflected in multi-criteria decision analyses - MCDA) as well as fair decision-making (as reflected in the accountability for reasonableness approach – A4R).

She is a founding Member of the Dutch (NVTAG) and the International Society for HTA (HTAi), past Board Member of both societies and has been co-chair of the HTAi/INAHTA Interest Group on Ethics from 2011 until 2017. Currently, she is a member of the HTAi Scientific Development and Capacity Building Advisory Committee, co-chairing the International Working Group to update the definition of HTA, and is associate editor of the International Journal of Technology Assessment in Health Care.

Furthermore, she is the scientific secretary of HTAi’s Global Policy Forum: for 2016-2017 (on value frameworks), for 2017-2018 (on horizon scanning) and for 2018-2019 (on real world evidence).

***Tanja Novaković***

Tanja Novaković je predsednica Sekcije za farmakoekonomiju Saveza farmaceutskih udruženja Srbije od njenog osnivanja 2006.godine. Direktor je prve konsultantske agencije u Srbiji iz oblasti zdravstvene ekonomije, Zem Solutions ([www.zem-solutions.com](http://www.zem-solutions.com)). Osnivač je udruženja ISPOR Srbija i od 2007 do 2009. godine bila je potpredsednica ISPOR Srbija. Tanja Novaković je diplomirala na Farmaceutskom fakultetu Univerziteta u Beogradu i završila poslediplomske studije iz ydravstvene ekonomoije na Farmaceutskom fakultetu Univerziteta u Gentu, u Belgiji.

**BIOGRAFIJE/BIOGRAPHIES**

Tanja je autor "Priručnika za farmakoekonomske evaluacije", prve takve publikacije iz oblasti farmakoekonomije u Srbiji.

Kao predsednica Sekcije za farmakoekonomiju kroz aktivnosti Sekcije učestvuje u razvoju zdravstvene ekonomije, farmakoekonomije i procene zdravstvenih tehnologija (engl. Health Technology Assessment – HTA).

Kao autor prvog Vodiča za farmakoekonomske evaluacije, Tanja Novaković učestvuje u kreiranju zdravstvene politike u Srbiji. Koautor je u jednom od prva tri HTA izveštaja za Srbiju. Takođe je bila angažovana da vodi grupu eksperata za definisanje postojećih elemenata paketa osnovnih zdravstvenih usluga u Srbiji (projekat Svetske banke i Ministarstva zdravlja Republike Srbije). Tanja Novaković je organizovala i bila predavač na mnogim nacionalnim skupovima i međunarodnim konferencijama koje su rezultirale u međunarodnoj saradnji u oblasti obrazovanja i razvijanju farmakoekonomije i HTA u Srbiji.

***Mark Parker***

Mark Parker je konsultant za zdravstvenu ekonomiju edukovan na odseku za [zdrаvstvenu ekonomiju Univerziteta u Liverpulu](http://www.liv.ac.uk/management/research/liverpool-health-economics/), Velika Britаnija. Direktor kompanije [Lifecode Solutions Ltd](http://lifecode.co/) i direktor Zem Solutions d.o.o, kosultantske agencije regionalnog lidera iz oblasti zdravstvene polotike, zdravstveno ekonomskog modelovanja, analize velikih podataka, istraživanja ishoda, refundacije I formiranja cena lekova i dr.( www.zem-solutions.com). Osnovno obrazovanje završio je iz oblasti softvera i elektronskog inženjerstva i realnog vremena "digitalna obrada signala", zajedno sa RF dizajnom, na Univerzitetu u Mančesteru. Mаgistаrske studije iz zdrаvstvene ekonomije nа Univerzitetu u Yorku, završio je 2009. godine. Mark Parker je autor modela i analiza zasnovanih na dokаzima za globalne dosijee za širok spektаr bolesti i za HTA izveštaje koji se podnose NICE, SMC i CVZ, kao i analiza za interno donošenje odlukа. U svojoj profesionalnoj karijeri radio je sa sledećim kompanijama: GSK (vаkcine), Sаnofi Aventis (dijаbetes), Wirral Primary Care Trust (validacija podataka iz realnog života), CHAMPS (intervencije za regulisanje telesne težine) i Shire (biološka terapija u hroničnim stanjima).

Mark Parker ima veliko iskustvo i stručnost u više terapijskih oblasti, populacionom modelovanju, ekonomiji, razvoju softvera, distributivnim sistemima i računarstvu, veštačkoj intelingenciji (1st, BSc Economics and Computer Science, UoL). Primenjujući stečene veštine i znanja razvio je argumente zasnovane na dokazima za procene zdravstvenih tehnologija. Navedene obuke, obrаzovаnje i iskustvo omogućili su primenu nаjsаvremenijih svetskih tehnika zа rešаvаnje složenih problemа na metodički, trаnspаrentаn i rаzumljiv nаčin, sа osnovnim fokusom nа trаnsfer znаnjа. Uživa u sportovima na vodi, snegu i vožnji motorom.

**BIOGRAFIJE/BIOGRAPHIES**

***Marija Polovina***

Dr Marija M. Polovina, PhD, is an Assistant Professor of Internal Medicine and Cardiology at the Faculty of Medicine, Belgrade University. She has specialized in internal medicine in 2012 and in cardiology in 2015. Since 2006, Dr Polovina has been employed at the Department of Cardiology of the Clinical Center of Serbia, Belgrade, Serbia. She has extensive experience in the clinical management of patients with various cardiovascular disorders and a substantial research background in the fields of heart failure, atrial fibrillation, diabetes, and cardiovascular outcomes. Dr Polovina has been a site investigator for the Eurobservational Research Program (EORP) for Atrial Fibrillation General Long-Term Registry of the European Society of Cardiology from 2014 to 2017. Since 2018, she has been appointed a National Coordinator for the novel EORP Heart Failure-3 Registry of the European Society of Cardiology. Dr Polovina has contributed as an author or coauthor in a number of scientific papers published in peer-reviewed journals, including a recent Position Statement from the European Hear Failure Association on the management of Heart Failure in Patients with Diabetes Mellitus. She has also coauthored several chapters in cardiovascular textbooks. Dr Polovina is a member of the Serbian Society of Cardiology, Serbian Association for heart Failure, European Society of Cardiology and Heart Failure Association of the European Society of Cardiology

**Proveriti satnicu, u programu kongresa je druga satnica ABSTRACTS**