

**VINO E SALUTE: NUOVE
CONOSCENZE SULL'AZIONE
POSITIVA DEGLI ANTOCIANI
SU INDICATORI DI SALUTE**

**VINO IN ZDRAVJE: NOVA
SPOZNANJA O POZITIVNEM
DELOVANJU ANTOCIANINOV
NA ZDRAVSTVENE
KAZALNIKE**

Prof. Sabina Passamonti
Università di Trieste
Dipartimento di Scienze della Vita

Il nostro contributo al progetto Naš prispevek k projektu

. Il nostro contributo al progetto AGROTUR+ è eseguire uno **studio pilota studio sulle azioni farmacologiche dei polifenoli dell'uva sull'organismo umano**. In particolare, continueremo le indagini sull'**azione degli antociani sulla fisiologia del fegato**

. I risultati saranno di grande interesse per i produttori e gli amanti del vino e contribuiranno a valorizzare questo prodotto tipico del Carso.

. Naš prispevek k projektu AGROTUR+ je izvedba pilotne študije o farmakološkem delovanju polifenolov grozdja na človeški organizem. Še posebej bomo nadaljevali raziskave delovanja antocianinov na fiziologijo jeter


. Rezultati bodo zelo zanimivi za pridelovalce in ljubitelje vina ter prispevali k valorizaciji tega značilnega kraškega proizvoda.

Partner di progetto 2 / Projektni partnerji 2



Bilirubin is a main blood biomarker of liver function

In addition to other tests, a **bilirubin test** is conducted in order to diagnose the conditions below.



- Cirrhosis, Hepatitis
- Disorders related to red blood cells production
- Blockage in the structures that carry bile from the liver
- For examining a patient with a history of alcoholism
- Monitor existing disorders in liver
- Assessing patients with drug toxicity

source: <https://images.app.goo.gl/Jp4DFoXYe81ECoNP7>

The market will be **ACCELERATING** at a CAGR of almost **8%**

INCREMENTAL GROWTH ▶ **\$562.5 mn**

The year-over-year growth rate for **2020** is estimated at **7.34%**

The market is **FRAGMENTED** with several players occupying the market share

38% of the growth will come from **NORTH AMERICA**

One of the **KEY DRIVERS** for this market will be the **INCREASING PREVALENCE OF JAUNDICE AND LIVER DISEASES**

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source:
<https://www.businesswire.com/news/home/20200128005511/en/%C2%A0Global-Bilirubin-Blood-Test-Market-2020-2024-Evolving-Opportunities-with-Abbott-Laboratories-and-Danaher-Corp.-Technavio>

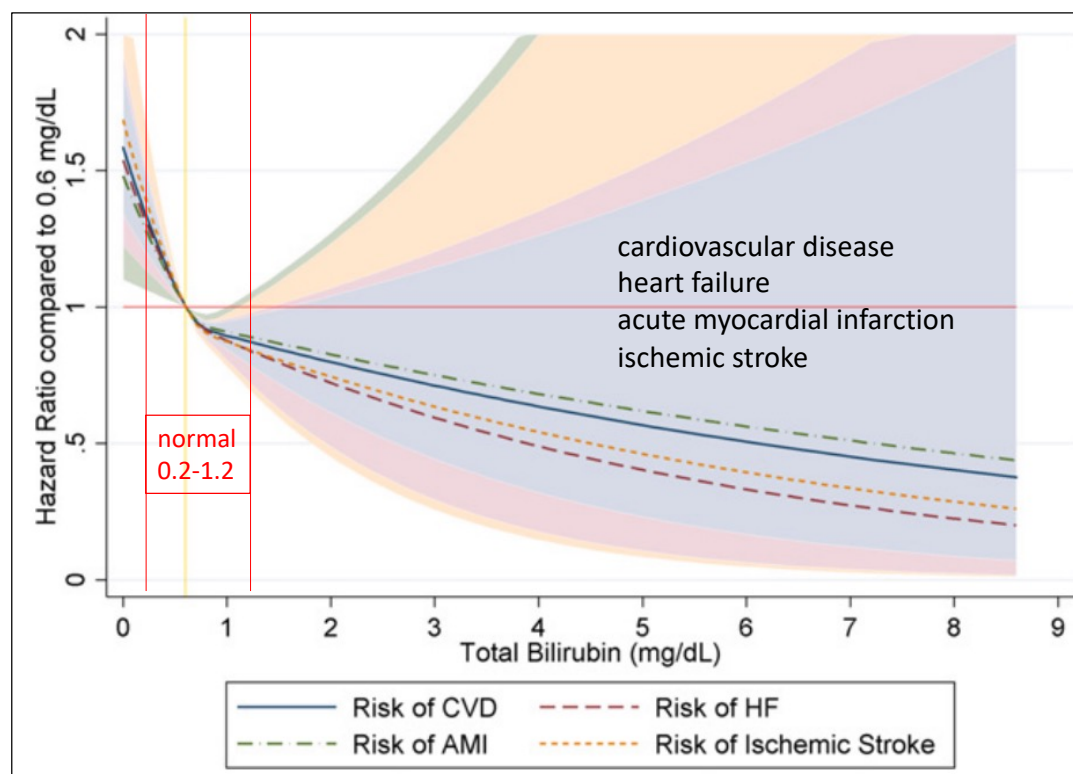
Bilirubin is beneficial for the cardiovascular system

Prospective cohort study,
2018

96 381 participants

Mildly elevated bilirubin levels had a lower risk of incident CVD, HF, AMI, and IS events, even after adjusting for known risk factors.

«*This inverse relationship between increasing bilirubin levels and cardiovascular disease occurred within the normal physiologic range.*»



The anthocyanin cyanidine 3-glucoside slows down
the first step of bilirubin elimination by the liver
*Therefore, wine pigments may help keeping blood
bilirubin at the upper level of the normal range*

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Cyanidin 3-glucoside targets a hepatic bilirubin transporter in rats

Paola Pelizzo^a, Marco Stebel^{a,1}, Nevenka Medic^a, Paola Sist^a, Andreja Vanzo^b, Andrea Anesi^c,
Urska Vrhovsek^c, Federica Tramer^a, Sabina Passamonti^{a,*}

^a Department of Life Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy

^b Department of Fruit Growing, Viticulture and Oenology, Agricultural Institute of Slovenia, Hacquetova ulica 17, SI-1000 Ljubljana, Slovenia

^c Food Quality and Nutrition, Research and Innovation Centre, Edmund Mach Foundation, Via E. Mach 1, 38010 San Michele all'Adige, Italy

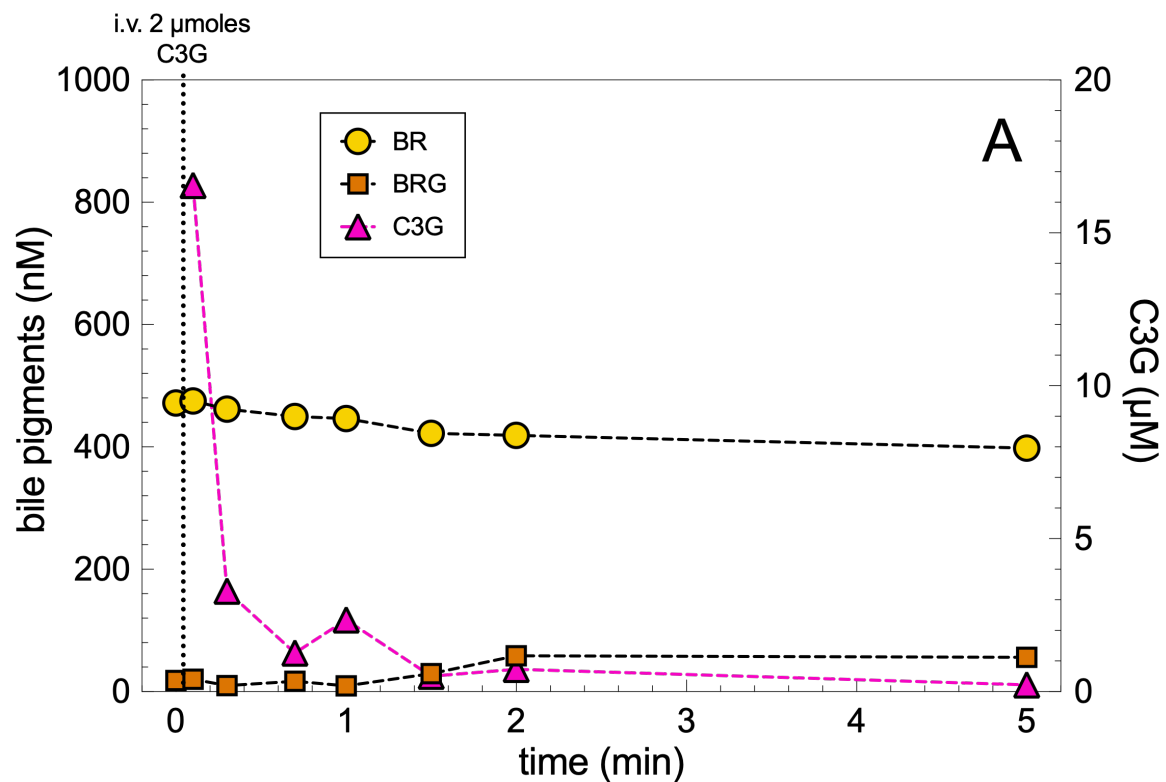


Does cyanidin 3-gucoside induce mild elevations of serum bilirubin in the intact animal ?

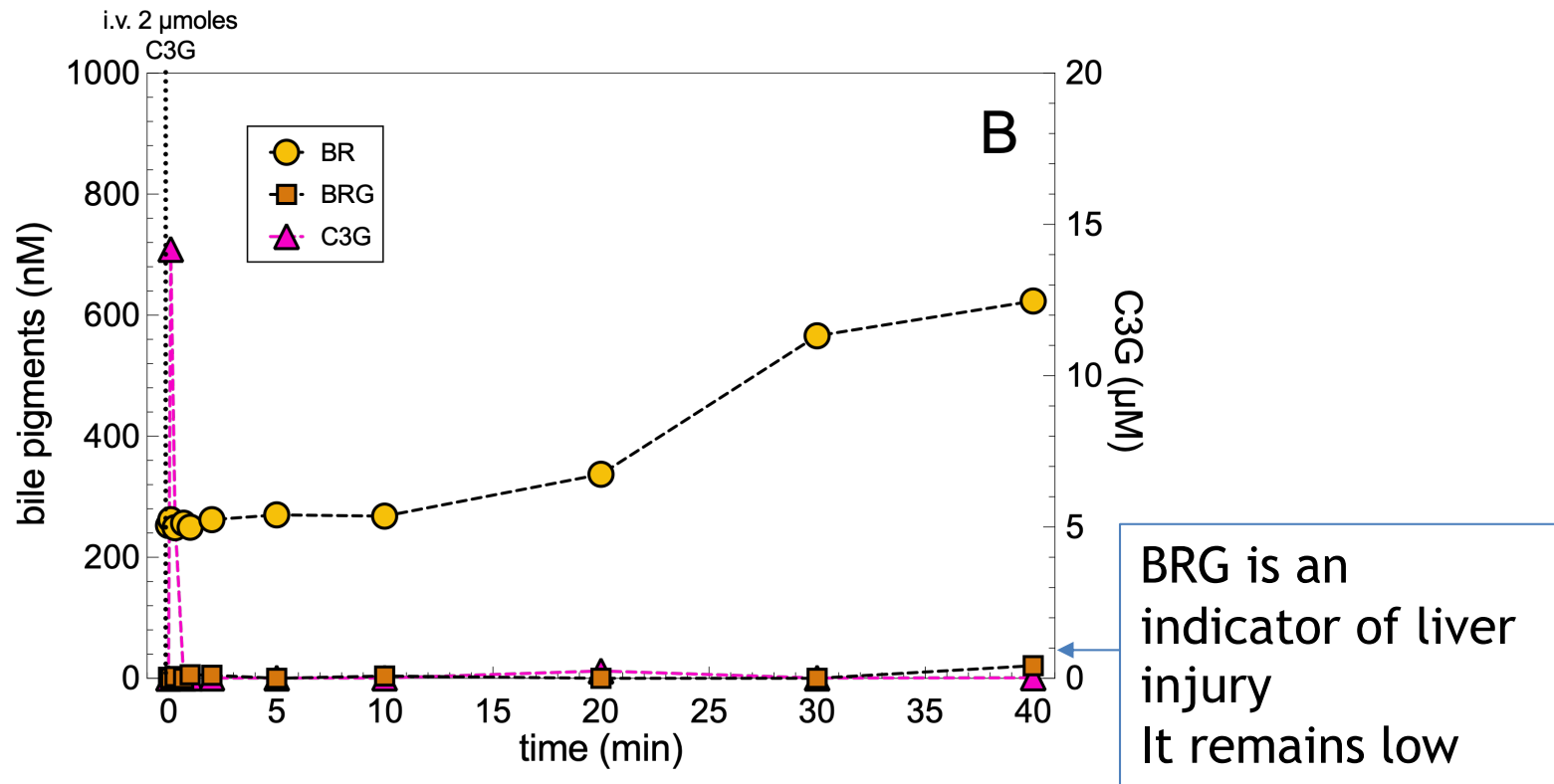
The rat as an experimental model

- Anaesthetised rats
- Intra-venous administration of cyanidin 3-glucoside
- Sampling drops of the rat blood
- Measuring blood bilirubin (University of Trieste) and cyanidin 3-glucoside (Agricultural Institute Slovenia)

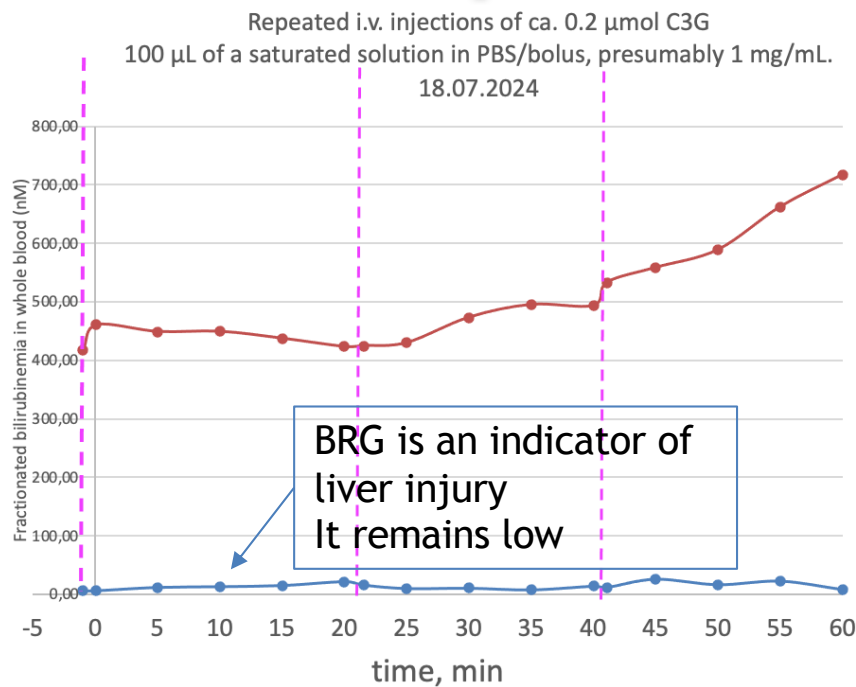
I.V. CYANIDIN 3-GLUCOSIDE (2 μmol) DOES NOT AFFECT RAT BILIRUBINEMIA IN THE SHORT TERM



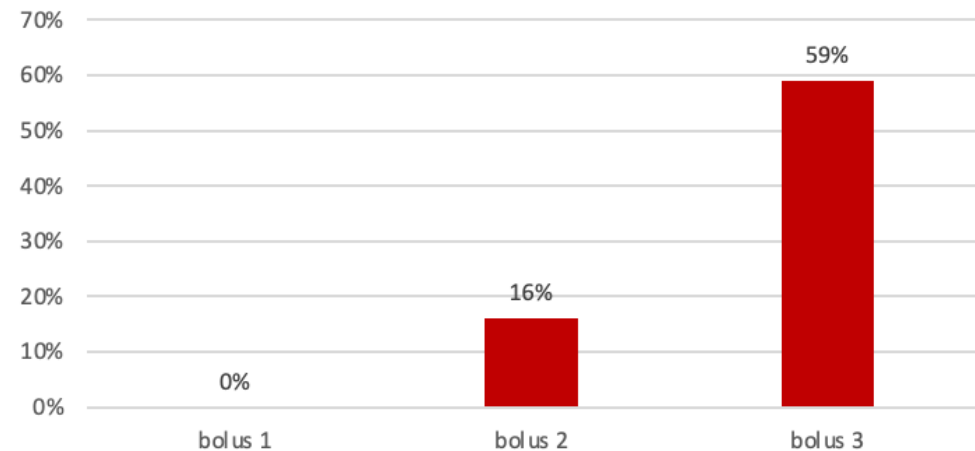
I.V. CYANIDIN 3-GLUCOSIDE (2 μmol) CAUSES A DELAYED, MILD AND STABLE INCREASE OF BILIRUBINEMIA



THE EFFECT OF CYANIDIN 3-GLUCOSIDE IS OBSERVED AT EVEN LOWER DOSES, IF REPEATED



Relative increase of bilirubinemia after each bolus of C3G. 18.07.2024



2-3 piccoli bicchieri di Teran al giorno non danneggiano il fegato, ma causano un piccolo aumento della bilirubinemia, che protegge la nostra salute

2-3 mali kozarci terana na dan ne poškodujejo jeter, povzročajo pa rahlo zvišanje bilirubina, kar varuje naše zdravje

2-3 small glasses of Teran a day do not harm the liver, but cause a small increase in bilirubinemia, which protects our health.

THANKS TO THE PILOT STUDY TEAM

Prof. Federica Tramer
lab chief manager
biochemical analyses
Dr. Marco Stebel
rat surgery

AND
Dr. Paola Sist
biochemical analyses

Dr. Andreja Vanzo, Lead Partner
Analyses of anthocyanins in rat biofluids



Contatti e link a canali social/ Kontakti in povezave na socialne medije

Grazie per l'attenzione!
Hvala za pozornost!

Titolo presentazione/ Naslov predstavitve

Nome e cognome del relatore

Ime in priimek govornika

ruolo e ente di appartenenza

vloga in institucija pripadnosti



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