# BOHAR EST CELL GROWTH SCIENCES

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## NEW RESEARCH ANALYSIS SHOWS VINIA REDUCES OXIDATION OF LDL-CHOLESTEROL TO SUPPORT CARDIOVASCULAR IMPROVED FUNCTIONING

New research analysis affirms the addition of the following structure function claims for VINIA<sup>®</sup> according to FDA Guidelines for Dietary Supplements:

- VINIA<sup>®</sup> prevents Lipid Oxidation
- VINIA® protects the body by preventing oxidative damage to the cells
- VINIA<sup>®</sup> reduces oxidation of LDL cholesterol

VANCOUVER, CANADA, and REHOVOT, ISRAEL, November 15, 2021 – <u>BioHarvest Sciences Inc.</u> ("BioHarvest" or the "Company") (CSE: BHSC) reports that recent research analysis provides additional support for antioxidation structure/function claims of VINIA<sup>®</sup>. This analysis, when added to the clinical study [1] conducted by the Company, provides a clear substantiation to BioHarvest's claims relating to anti-oxidation, lipid antioxidation, and scavenging free radicals.

The Company studied five Randomized Controlled Trials (RCT) **[2]** that were conducted with grapes in the form of red wine and juice, and which reported decreased LDL-C oxidation as well as reduction in DNA oxidative damage and other oxidative outcomes. Meta-analysis **[3]** of four RCTs found that grape polyphenols reduced LDL-C oxidation both with respect to the control group and with respect to baseline. This meta-analysis provides additional support that VINIA<sup>®</sup> has the beneficial effect of decreasing lipid oxidation, given that VINIA<sup>®</sup> red grape powder boasts the full spectrum of the active red grape ingredients (all polyphenols, including Piceid-Resveratrol).

Dr. Yochi Hagay, the CTO, said, "Cholesterol damages the cardiovascular functioning when it gets oxidized. The unique composition of VINIA® (that includes a complex of polyphenols with Piceid resveratrol) reduces the oxidation of the lipids as well as improves blood flow. These combined actions provide for an improved cardiovascular functioning. I believe that further clinical trials and research will prove additional important benefits of VINIA®."

Ilan Sobel, the CEO, said "The unique functional capabilities of VINIA<sup>®</sup> are creating a significant demand for VINIA<sup>®</sup> across the USA, similar to the demand we have been experiencing in Israel. These additional structure function claims broaden the scope of benefits that VINIA<sup>®</sup> brings to the US consumers and will raise further awareness for the brand and no doubt continue to increase growth momentum.

To access USA and Israel sales information, the Company refers readers to the <u>press release issued on October</u> <u>5, 2021</u> available at <u>www.bioharvest.com</u>].

### About BioHarvest Sciences Inc.

BioHarvest Sciences Inc. (CSE: BHSC) is a fast-growing Biotech firm listed on the Canadian Securities Exchange. BioHarvest has developed a patented bio-cell growth platform technology capable of growing the active and beneficial ingredients in fruit and plants, at industrial scale, without the need to grow the plant itself. This technology is economical, ensures consistency, and avoids the negative environmental impacts associated with traditional agriculture. BioHarvest is currently focused on nutraceuticals and the medicinal cannabis markets. Visit: <u>www.bioharvest.com</u>.



**BioHarvest Sciences Inc.** Ilan Sobel, Chief Executive Officer

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#### **Forward-Looking Statements**

Information set forth in this news release includes forward-looking statements that are based on management's current estimates, beliefs, intentions, and expectations, and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. There is no assurance that the Israeli market results will translate directly into the U.S. markets which may depend on different consumer preferences and more substantial marketing expenditures and resources. There is no assurance that the broaden scope of benefits of VINIA® being brought to the US consumers or the unique functional capabilities of VINIA<sup>®</sup> will raise further awareness for the brand and continue to increase growth momentum. There is no assurance that strong sales metrics experienced to date in the USA or in Israel will result in future demand or increase for VINIA® sales. Markets for nutraceuticals are unpredictable and subject to changes in consumer tastes and trends as well as economic factors beyond our control. Delays and cost overruns may result in delays achieving our objectives obtaining market acceptance, and regulatory approvals for geographic expansion is subject to risk and cannot be guaranteed. Projected sales of Cannabis will require the Company to obtain production and/or export licensing which cannot be assured.

All forward-looking statements are inherently uncertain and actual results may be affected by a number of material factors beyond our control. Readers should not place undue reliance on forward-looking statements. BHSC does not intend to update forward-looking statement disclosures other than through our regular management discussion and analysis disclosures.

Neither the Canadian Securities Exchange nor its Regulation Services Provider accept responsibility for the adequacy or accuracy of this release.

#### REFERENCES

#### [1] Reference for BioHarvest's clinical trial

1. Nachum Vaisman and Eva Niv. Daily consumption of red grape cell powder in a dietary dose improves cardiovascular parameters: a double blind, placebo-controlled, randomized study", 2015. Int J Food Sci Nutr. 66(3):342-966(3):342-9.

5. Toaldo, I.M., F.A. Cruz, E.L. da Silva, and M.T. Bordignon-Luiz. 2016. Acute consumption of organic and conventional tropical grape juices (Vitis labrusca L.) increases antioxidants in plasma and erythrocytes, but not glucose and uric acid levels, in healthy individuals. Nutr Res. 36:808-817

#### [2] References for the 5 RCTs

1. Gaiotti, and A. De Lorenzo. 2015. Changes in LDL Oxidative Status and Oxidative and Inflammatory Gene Expression after Red Wine Intake in Healthy People: A Randomized Trial. Mediators of inflammation. 2015:317348

2. Estruch, R., E. Sacanella, F. Mota, G. Chiva-Blanch, E. Antunez, E. Casals, R. Deulofeu, D.Rotilio, C. Andres-Lacueva, R.M. Lamuela-Raventos, G. de Gaetano, and A. UrbanoMarquez. 2011. Moderate consumption of red wine, but not gin, decreases erythrocyte superoxide dismutase activity: a randomised cross-over trial. Nutrition, metabolism, and cardiovascular diseases: NMCD. 21:46-53.

3. Guler, A., A. Candemir, O. Merken, F.B. Asiklar, Y. Dilli, and N. Yildiz. 2019. Determination of physical, biochemical and antioxidant properties and mineral composition of some new developed grape varieties and selected clones from Turkey. FRESENIUS ENVIRONMENTAL BULLETIN. 28:10146-10153.

4. Martins, N.C., G.P. Dorneles, A.S. Blembeel, J.P. Marinho, I.C.T. Proenca, M.J.V. da Cunha Goulart, G.B. Moller, E.P. Marques, D. Pochmann, M. Salvador, V. Elsner, A. Peres, C. Dani, and J.L. Ribeiro. 2020. Effects of grape juice consumption on oxidative stress and

inflammation in male volleyball players: A randomized, double-blind, placebo-controlled clinical trial. Complement Ther Med. 54:102570.

5. Toaldo, I.M., F.A. Cruz, E.L. da Silva, and M.T. Bordignon-Luiz. 2016. Acute consumption of organic and conventional tropical grape juices (Vitis labrusca L.) increases antioxidants in plasma and erythrocytes, but not glucose and uric acid levels, in healthy individuals.

Nutr Res. 36:808-817

#### [3] Reference for the meta-analysis

1. Lupoli, R., P. Ciciola, G. Costabile, R. Giacco, M. Minno, and B. Capaldo. 2020. Impact of Grape Products on Lipid Profile: A Meta-Analysis of Randomized Controlled Studies. J Clin Med. 9

