

Patient NAME Mr John Doe	DATE OF BIRTH 1992-Jun-12	DISEASE Colorectal	STAGE II	Physician NAME Administrator
SPECIMEN	VIAL IDs 4			

REPORT SUMMARY

CTCs COUNT: Isolated 2 cells/ml , SD +/- 0.3 cells
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NATURAL SUBSTANCES SENSITIVITY

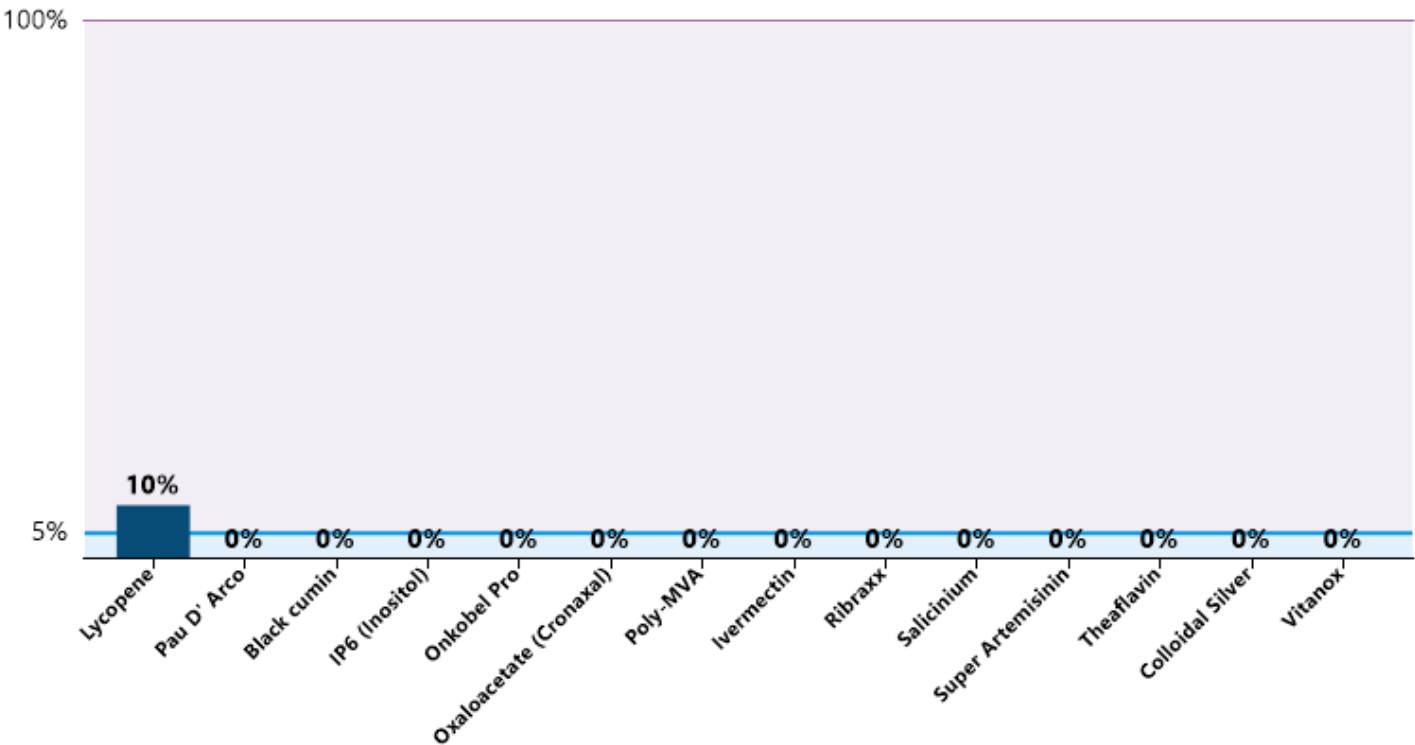
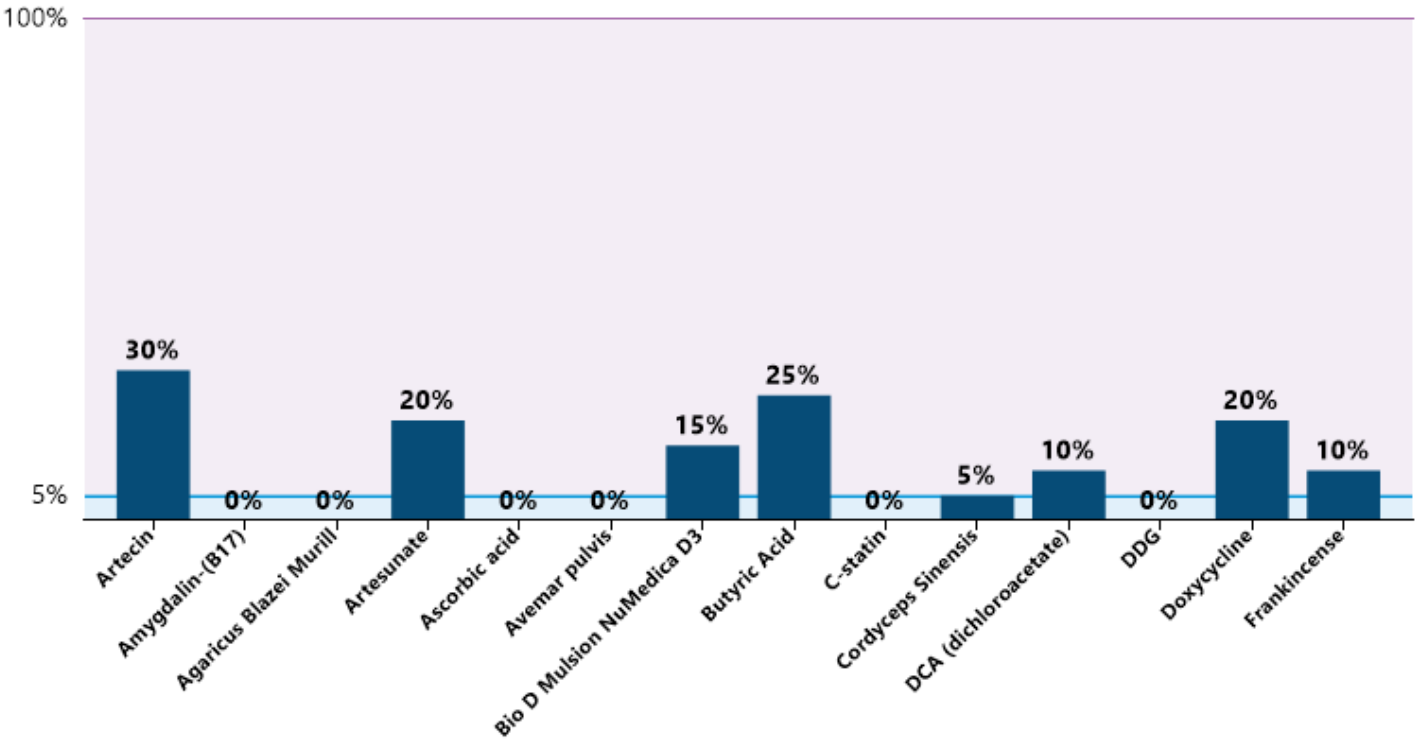
Class I Cytotoxic Agents Artecin, Artesunate, Bio D Mulsion NuMedica D3, Butyric Acid, DCA (dichloroacetate), Doxycycline, Frankincense, Lycopene	Class II Immunostimulants / Immunomodulators Boswellia Serratta, Fucoidan	Class III PK Inhibitors Apigenin, Indol 3 Carbinol, Melatonin
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* Disclaimer! The natural substances that are tested in our lab facilities are not bonded from restriction for medical use.

No sensitivity

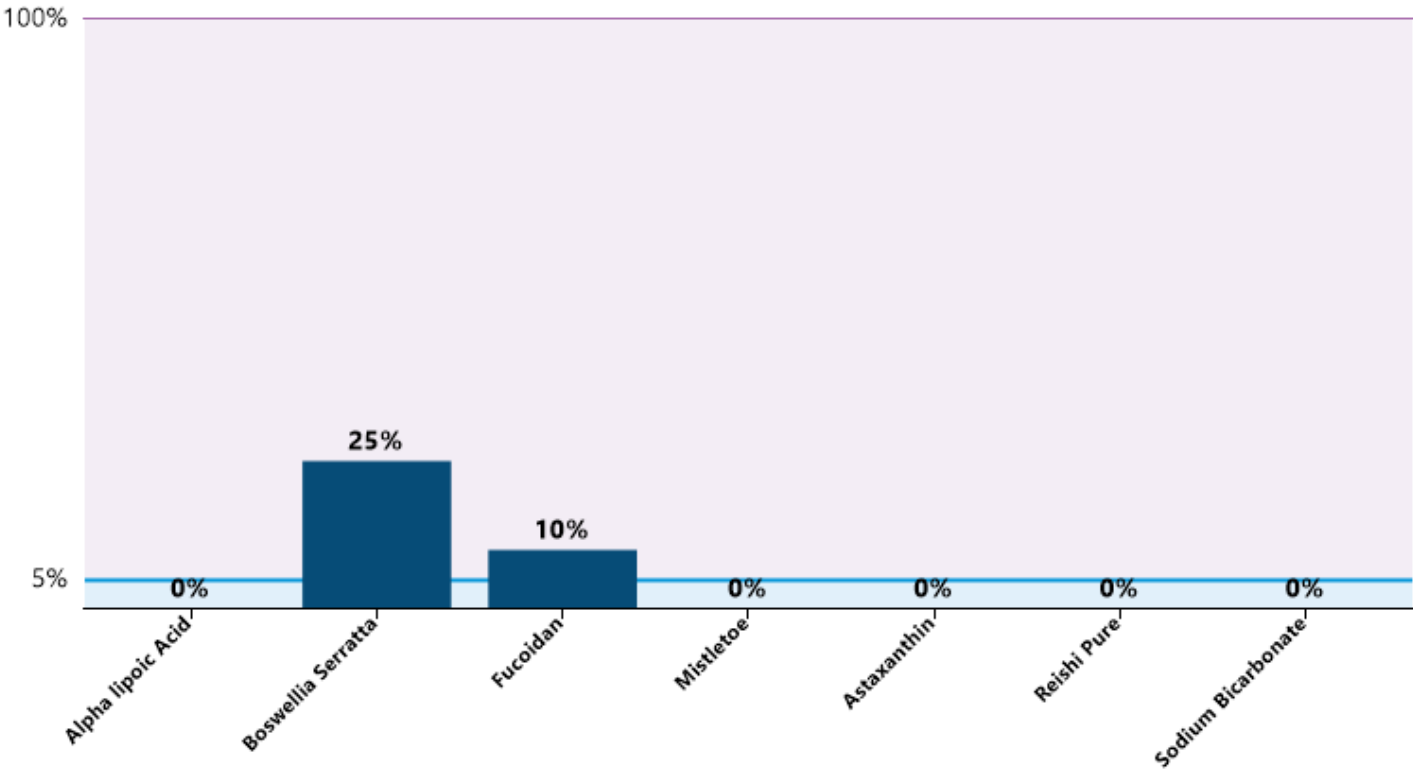
Sensitivity

Class I (Cytotoxic Agents)

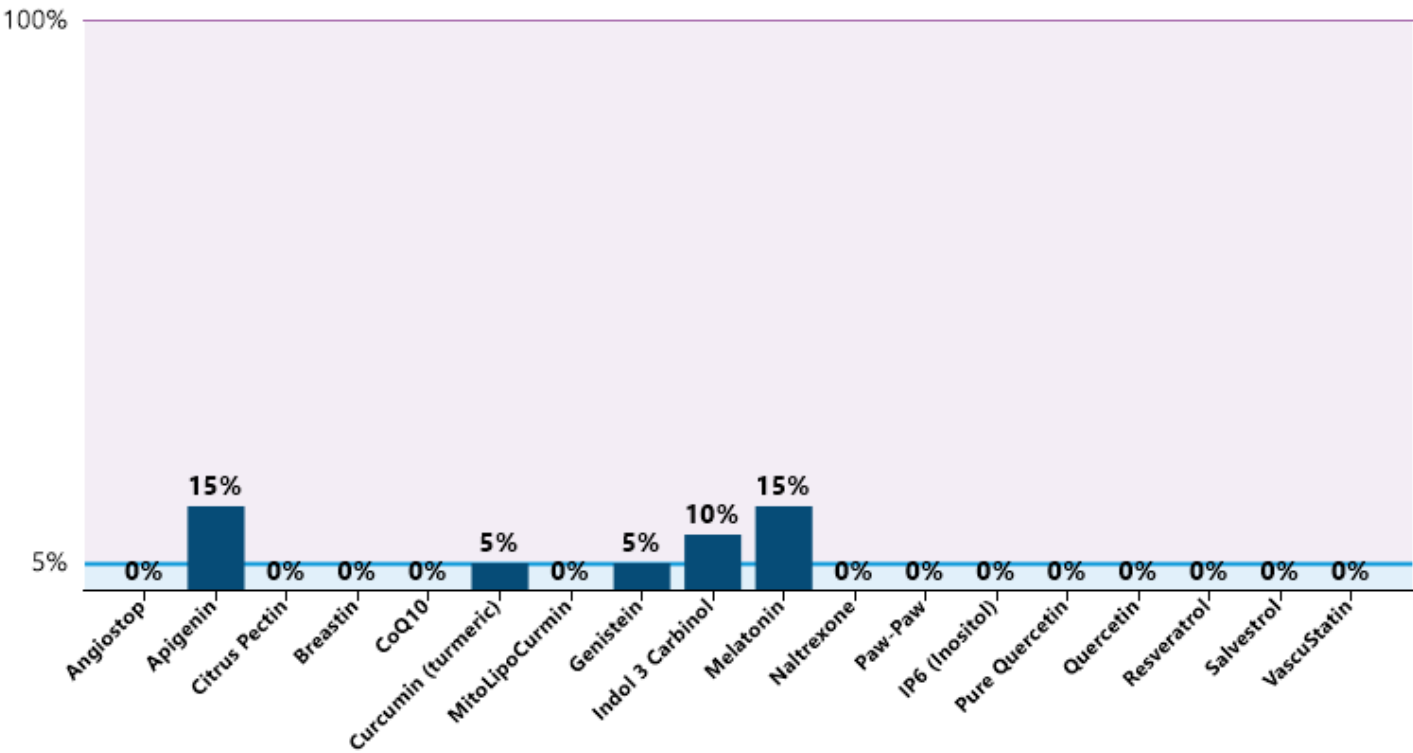


No sensitivity Sensitivity

Class II (Immunostimulants / Immunomodulators)



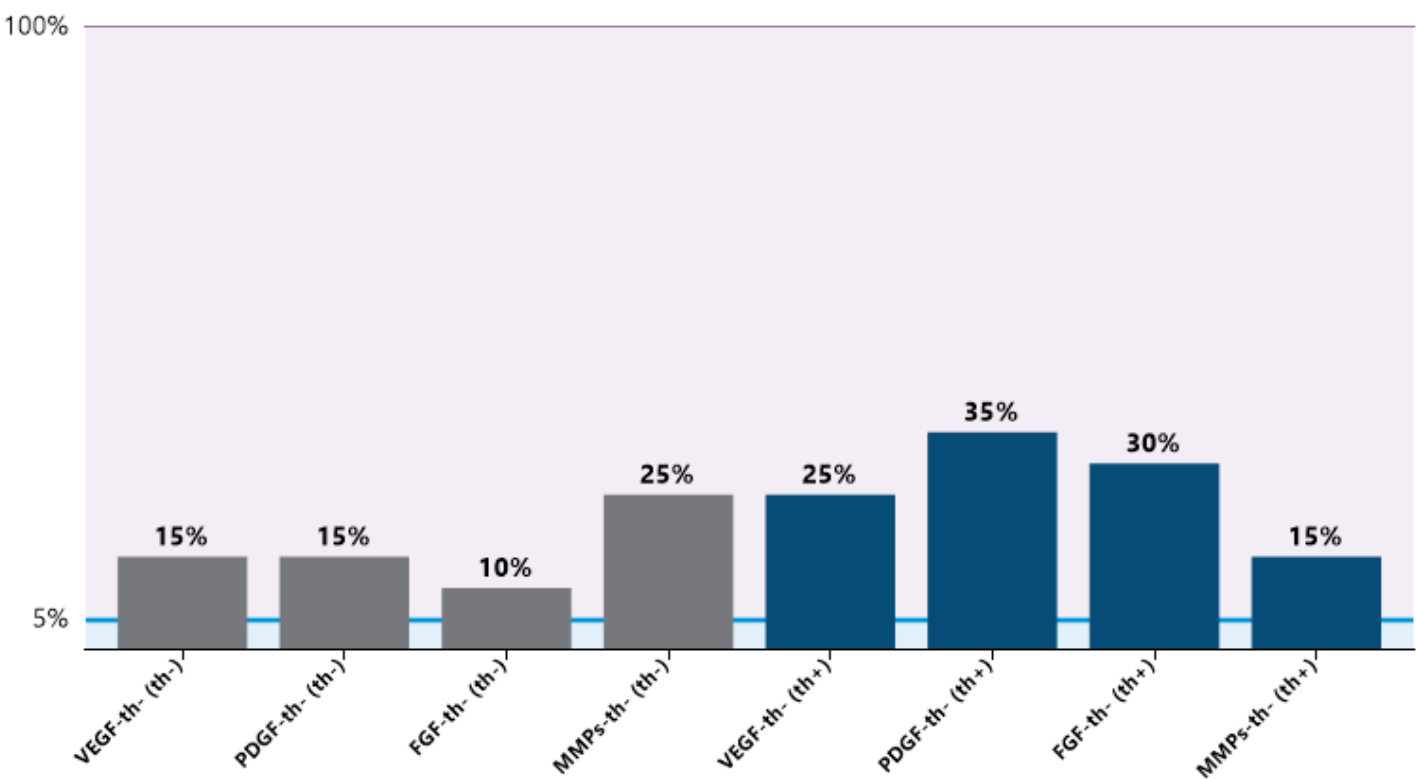
Class III (PK Inhibitors)



No sensitivity Sensitivity

Malignant Cells - Thalidomide

th- th+



Information

Laboratory Process

- Isolation of the malignant cells using flow cytometry and negative selection.
- The isolated cells were expanded and the appropriate substances added.
- Depending on the mechanism of action different assays followed.

This Test report is issued based on testing the sample / specimen examined by the Laboratory. Modification of data, selective breeding and using portions of this test report is forbidden. The laboratory assumes no liability for improper use or improper interpretation of the results.

Sincerely,

Dr. Ioannis Papasotiriou MD, PhD, SCym

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- b. Nuzzo G, Senese G, Gallo C, Albiani F, Romano L, d'Ippolito G, Manzo E, Fontana A. Antitumor Potential of Immunomodulatory Natural Products. *Mar Drugs.* 2022 Jun 8;20(6):386. doi: 10.3390/md20060386. PMID: 35736189; PMCID: PMC9229642.
- c. Toloudi M, Apostolou P, Chatziioannou M, Papasotiriou I. Correlation between Cancer Stem Cells and Circulating Tumor Cells and Their Value. *Case Rep Oncol.* 2011 Jan 29;4(1):44–54. doi: 10.1159/000324403. PMID: 21526006; PMCID: PMC3082489.
- d. Dong S, Guo X, Han F, He Z, Wang Y. Emerging role of natural products in cancer immunotherapy. *Acta Pharm Sin B.* 2022 Mar;12(3):1163–1185. doi: 10.1016/j.apsb.2021.08.020. Epub 2021 Aug 21. PMID: 35530162; PMCID: PMC9069318.
- e. Ling T, Lang WH, Maier J, Quintana Centurion M, Rivas F. Cytostatic and Cytotoxic Natural Products against Cancer Cell Models. *Molecules.* 2019 May 26;24(10):2012. doi: 10.3390/molecules24102012. PMID: 31130671; PMCID: PMC6571673.
- f. Toloudi M, Ioannou E, Chatziioannou M, Apostolou P, Kiritsis C, Manta S, Komiotis D, Papasotiriou I. Comparison of the growth curves of cancer cells and cancer stem cells. *Curr Stem Cell Res Ther.* 2014 Mar;9(2):112–6. doi: 10.2174/1574888x0902140121163539. PMID: 24359142.
- g. Gairola K, Gururani S, Bahuguna A, Garia V, Pujari R, Dubey SK. Natural products targeting cancer stem cells: Implications for cancer chemoprevention and therapeutics. *J Food Biochem.* 2021 Jul;45(7):e13772. doi: 10.1111/jfbc.13772. Epub 2021 May 24. PMID: 34028051.