

# Pharmascience Inc.

6111 Royalmount Avenue, Montreal, Québec, Canada, H4P 2T4



## Certificate of Analysis

Client:	Ostara Médical	22-Aug-2023 Date Received
Sample Name:	GAZE CAKE GCK-001 / E3-GCK-001	23-Aug-2023 Analysis Date
Sample ID	CNF-1710-02	24-Aug-2023 Reporting Date
Sample Type:	Dried Flower	
Certificate Number:	2023-02429 Rev 0	

Cannabinoids	Method (Date of last validation:25-03-2022)	LOD (%w/w)	Result (%w/w)	LOD(mg/g)	Result (mg/g)
Tetrahydrocannabinol (d9-THC)	HPLC-UV Validated Assay CN0001	0.04	0.38	0.4	3.8
Tetrahydrocannabinol Acid A (THCA)	HPLC-UV Validated Assay CN0001	0.04	37.47	0.4	374.7
Cannabidiol (CBD)	HPLC-UV Validated Assay CN0001	0.04	<0,04	0.4	<0,4
Cannabidiolic Acid (CBDA)	HPLC-UV Validated Assay CN0001	0.04	0.09	0.4	0.9
Cannabigerol (CBG)	HPLC-UV Validated Assay CN0001	0.04	0.16	0.4	1.6
Cannabigerolic Acid (CBGA)	HPLC-UV Validated Assay CN0001	0.04	1.67	0.4	16.7
Cannabichromene (CBC)	HPLC-UV Validated Assay CN0001	0.04	<0,04	0.4	<0,4
Cannabidivarin (CBDV)	HPLC-UV Validated Assay CN0001	0.04	<0,04	0.4	<0,4
Cannabinol (CBN)	HPLC-UV Validated Assay CN0001	0.04	<0,04	0.4	<0,4
Δ8-Tetrahydrocannabinol (d8-THC)	HPLC-UV Validated Assay CN0001	0.04	<0,04	0.4	<0,4
Total THC and CBD		Calculation	Total (% w/w)	Total (mg/g)	
Total THC	d9-THC % + (0.877 x THCA %)		33.00	330.0	
Total CBD	CBD % + (0.877 x CBDA %)		0.08	0.8	

Loss on Drying (CN0012)	Method Description	Result (%w/w)
Loss on Drying %w/w	Moisture Analyzer Validated Method CN0012	12.0

LOD - Limit of Detection

*Jing Zhao*

## Certificate of Analysis

Client:	Ostara Médical	22-Aug-2023 Date Received
Sample Name / Lot:	GAZE CAKE GCK-001 / E3-GCK-001	23-Aug-2023 Analysis Date
Sample ID:	CNF-1710-02	24-Aug-2023 Reporting Date
Sample Type:	Dried Flower	
Certificate Number:	2023-02429 Rev 0	

Terpenes	Method (Date of last validation:22-04-2022)	LOD (ppm)	Result (ppm)	Result (%)
(R)-(+)-Limonene	GC-MS Headspace Validated Assay CN0068	20.0	9525	0.9525
(-)-trans-Caryophyllene	GC-MS Headspace Validated Assay CN0068	20.0	6533	0.6533
alpha-Humulene	GC-MS Headspace Validated Assay CN0068	20.0	3390	0.3390
Linalool	GC-MS Headspace Validated Assay CN0068	20.0	3212	0.3212
Myrcene	GC-MS Headspace Validated Assay CN0068	20.0	3115	0.3115
trans-Ocimene	GC-MS Headspace Validated Assay CN0068	20.0	2281	0.2281
alpha-Pinene	GC-MS Headspace Validated Assay CN0068	20.0	2118	0.2118
beta-Pinene	GC-MS Headspace Validated Assay CN0068	20.0	1972	0.1972
alpha-Terpineol	GC-MS Headspace Validated Assay CN0068	20.0	1951	0.1951
(+)-Fenchol	GC-MS Headspace Validated Assay CN0068	20.0	1612	0.1612
Trans-Nerolidol	GC-MS Headspace Validated Assay CN0068	20.0	1304	0.1304
(+)-Valencene	GC-MS Headspace Validated Assay CN0068	20.0	1222	0.1222
Farnesene (sum of isomers)	GC-MS Headspace Validated Assay CN0068	20.0	619	0.0619
Camphene	GC-MS Headspace Validated Assay CN0068	20.0	279	0.0279
(+/-)-Borneol	GC-MS Headspace Validated Assay CN0068	20.0	265	0.0265
(-)-alpha-Bisabolol	GC-MS Headspace Validated Assay CN0068	20.0	149	0.0149
(-)-Caryophyllene oxide	GC-MS Headspace Validated Assay CN0068	20.0	136	0.0136
Terpinolene	GC-MS Headspace Validated Assay CN0068	20.0	83	0.0083
Geranyl acetate	GC-MS Headspace Validated Assay CN0068	20.0	72	0.0072
cis-Ocimene	GC-MS Headspace Validated Assay CN0068	20.0	32	0.0032
(-)-alpha-Santalene	GC-MS Headspace Validated Assay CN0068	20.0	29	0.0029
Eucalyptol	GC-MS Headspace Validated Assay CN0068	20.0	26	0.0026
(+/-)-Fenchone	GC-MS Headspace Validated Assay CN0068	20.0	26	0.0026
gamma-Terpinene	GC-MS Headspace Validated Assay CN0068	20.0	24	0.0024
(R)-(-)-alpha-Phellandrene	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
Sabinene	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(1s)-(+)-3-Carene	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
alpha-Terpinine	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
p-Cymene	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(-)-Isopulegol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(+/-)-Camphor	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
Isoborneol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
L-Menthol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
Geraniol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(+)-Pulegone	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(-)-alpha-Cedrene	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
cis-Nerolidol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(-)-Guaiol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
(+)-Cedrol	GC-MS Headspace Validated Assay CN0068	20.0	<20	<0.0020
<b>Total Terpene</b>			<b>39978</b>	<b>3.9978</b>

LOD - Limit of Detection

*Jing Zhao*



**Certificate of Analysis**

<b>Client:</b>	Ostara Médical	<b>22-Aug-2023</b> Date Received
<b>Sample Name:</b>	GAS CAKE GCK-001 / E2-GCK-001	<b>23-Aug-2023</b> Analysis Date
<b>Sample ID</b>	CNF-1710-01	<b>29-Aug-2023</b> Reporting Date
<b>Sample Type:</b>	Dried Cannabis	
<b>Certificate Number:</b>	2023-02428 Rev 0	

Aflatoxins (Mycotoxins)	Method (Date of last validation: 08-06-2022)	LLOQ	Units	Tolerance Limit*	Result
Aflatoxin-B1	LC-MS-MS Validated Assay CN0048	1.00	ppb	2	<1,00
Aflatoxin-B2	LC-MS-MS Validated Assay CN0048	1.00	ppb		<1,00
Aflatoxin-G1	LC-MS-MS Validated Assay CN0048	1.00	ppb		<1,00
Aflatoxin-G2	LC-MS-MS Validated Assay CN0048	1.00	ppb		<1,00
Total (Aflatoxin-B1+B2+G1+G2)			ppb	4	<4,00

\*EP <2.8.18>

Heavy Metals	Method (Date of last validation: 03-09-2020)	LLOQ	Units	Tolerance Limit*	Result
Arsenic	ICP-MS Validated Assay CN0002	0.10	ppm	0.2	<0,10
Cadmium	ICP-MS Validated Assay CN0002	0.10	ppm	0.3	<0,10
Lead	ICP-MS Validated Assay CN0002	0.25	ppm	0.5	<0,25
Mercury	ICP-MS Validated Assay CN0002	0.05	ppm	0.1	<0,05

\*ICH Q3D. Tolerance limit based on 10g of daily consumption.

Water Activity	Method (Date of Last Validation 31-10-2022)	Result (a <sub>w</sub> )
Water Activity	Validated Method CN0083	0.4947

LLOQ - Lower Limit of Quantification

Certificate of Analysis

Client:	Ostara Médical	22-Aug-2023 Date Received
Sample Name / Lot:	GAS CAKE GCK-001 / E2-GCK-001	23-Aug-2023 Analysis Date
Sample ID:	CNF-1710-01	29-Aug-2023 Reporting Date
Sample Type:	Dried Cannabis	
Certificate Number:	2023-02428 Rev 0	

Pesticides	Method (Date of last validation:17-01-2020)	LLOQ	Units	Tolerance Limit*	Result
Abamectin	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Acephate	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Acequinocyl	LC-MS-MS Validated Assay CN0004	0.03	ppm	0.03	<0.03
Acetamiprid	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Aldicarb	LC-MS-MS Validated Assay CN0004	1.00	ppm	1	<1.00
Allethrin	LC-MS-MS Validated Assay CN0004	0.20	ppm	0.2	<0.20
Azadirachtin	LC-MS-MS Validated Assay CN0004	1.00	ppm	1	<1.00
Azoxystrobin	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Benzovindiflupyr	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Bifenazate	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Bifenthrin	LC-MS-MS Validated Assay CN0004	1.00	ppm	1	<1.00
Boscalid	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Buprofezin	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Carbaryl	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Carbofuran	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Chlorantraniliprole	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Chlorphenapyr	GC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Chlorpyrifos	LC-MS-MS Validated Assay CN0004	0.04	ppm	0.04	<0.04
Clofentezine	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Clothianidin	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Coumaphos	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Cyantranilipole	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Cyfluthrin	GC-MS-MS Validated Assay CN0004	0.20	ppm	0.2	<0.20
Cypermethrin	LC-MS-MS Validated Assay CN0004	0.30	ppm	0.3	<0.30
Cyprodinil	LC-MS-MS Validated Assay CN0004	0.25	ppm	0.25	<0.25
Daminozide	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Deltamethrin	LC-MS-MS Validated Assay CN0004	0.50	ppm	0.5	<0.50
Diazinon	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Dichlorvos	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Dimethoate	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Dimethomorph	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Dinotefuran	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Dodemorph	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Endosulfan sulfate	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Endosulfan-alpha	GC-MS-MS Validated Assay CN0004	0.20	ppm	0.2	<0.20
Endosulfan-beta	GC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Ethoprophos	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Etofenprox	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Etoxazole	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Etridiazol	GC-MS-MS Validated Assay CN0004	0.03	ppm	0.03	<0.03
Fenoxycarb	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Fenpyroximate	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Fensulfothion	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Fenthion	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Fenvalerate	GC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Fipronil	LC-MS-MS Validated Assay CN0004	0.06	ppm	0.06	<0.06
Fonicamid	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05

\*Health Canada Tolerance Limit

LLOQ - Lower Limit of Quantification

*Jing Zhao*



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<b>Client:</b>	Ostara Médical	<b>22-Aug-2023</b> Date Received
<b>Sample Name / Lot:</b>	GAS CAKE GCK-001 / E2-GCK-001	<b>23-Aug-2023</b> Analysis Date
<b>Sample ID:</b>	CNF-1710-01	<b>29-Aug-2023</b> Reporting Date
<b>Sample Type:</b>	Dried Cannabis	
<b>Certificate Number:</b>	2023-02428 Rev 0	

Pesticides	Method (Date of last validation: 17-01-2020)	LLOQ	Units	Tolerance Limit*	Result
Fludioxonil	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Fluopyram	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Hexythiazox	LC-MS-MS Validated Assay CN0004	0.01	ppm	0.01	<0.01
Imazail	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Imidacloprid	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Iprodione	LC-MS-MS Validated Assay CN0004	1.00	ppm	1	<1.00
Kinoprene	GC-MS-MS Validated Assay CN0004	0.50	ppm	0.50	<0.50
Kresoxim-methyl	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Malathion	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Metaxalyl	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Methiocarb	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Methomyl	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Methoprene	LC-MS-MS Validated Assay CN0004	2.00	ppm	2	<2.00
Methyl parathion	GC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Mevinphos	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
MGK-264	GC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Myclobutanil	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Naled	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Novaluron	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Oxamyl	LC-MS-MS Validated Assay CN0004	3.00	ppm	3.0	<3.00
Paclobutrazol	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Permethrin	LC-MS-MS Validated Assay CN0004	0.50	ppm	0.5	<0.50
Phenothrin	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Phosmet	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Piperonyl butoxide	LC-MS-MS Validated Assay CN0004	0.20	ppm	0.2	<0.20
Pirimicarb	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Prallethrin	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Propiconazole	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Propoxur	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Pyraclostrobin	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Pyrethrins	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Pyridaben	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Quintozene	GC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Resmethrin	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Spinetoram	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Spinosad	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Spirodiclofen	LC-MS-MS Validated Assay CN0004	0.25	ppm	0.25	<0.25
Spiromesifen	LC-MS-MS Validated Assay CN0004	3.00	ppm	3	<3.00
Spirotetramat	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Spiroxamine	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Tebuconazole	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Tebufenozide	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Teflubenzuron	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Tetrachlorvinphos	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Tetramethrin	LC-MS-MS Validated Assay CN0004	0.10	ppm	0.1	<0.10
Thiacloprid	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Thiamethoxam	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02
Thiophanate-methyl	LC-MS-MS Validated Assay CN0004	0.05	ppm	0.05	<0.05
Trifloxystrobin	LC-MS-MS Validated Assay CN0004	0.02	ppm	0.02	<0.02

\*Health Canada Tolerance Limit

LLOQ - Lower Limit of Quantification



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## Certificate of Analysis

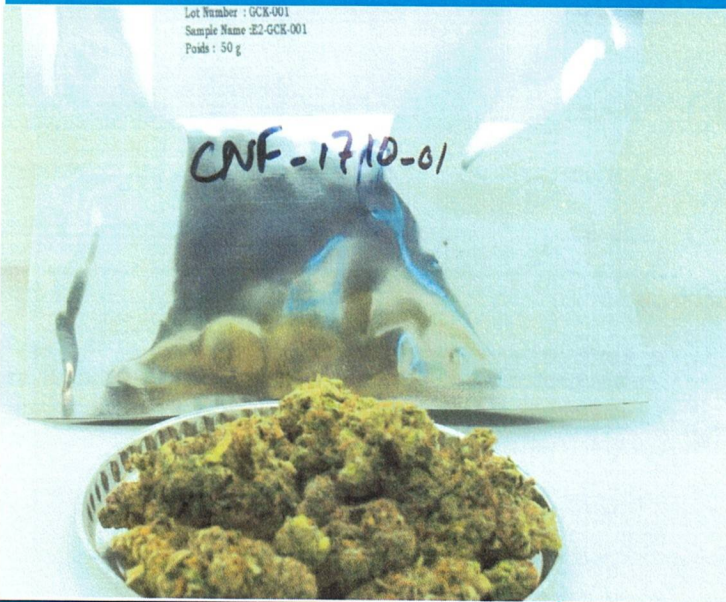


Client:	Ostara Médical	22-Aug-2023 Date Received
Sample Name:	GAS CAKE GCK-001 / E2-GCK-001	23-Aug-2023 Analysis Date
Sample ID	CNF-1710-01	29-Aug-2023 Reporting Date
Sample Type:	Dried Cannabis	
Certificate Number:	2023-02428 Rev 0	

Microbiological Assay	Method (Date of last validation:23-10-2020)	Tolerance Limit*	Units	Result	Pass/Fail
Total Aerobic Microbial Count	USP and EP Harmonized Method CN0027	2,500,000	CFU/g	368,500	Pass
Total Combined Yeast and Moulds Count	USP and EP Harmonized Method CN0027	250,000	CFU/g	945,000	Fail
Bile-tolerant Gram Negative Bacteria	USP and EP Harmonized Method CN0027	10,000	CFU/g	<10	Pass
Escherichia coli	USP and EP Harmonized Method CN0027	Absent in 1g	N/AP	Absent	Pass
Salmonella	USP and EP Harmonized Method CN0027	Absent in 25g	N/AP	Absent	Pass
Pseudomonas aeruginosa	USP and EP Harmonized Method CN0027	Absent in 1g	N/AP	Absent	Pass
Staphylococcus aureus	USP and EP Harmonized Method CN0027	Absent in 1g	N/AP	Absent	Pass

\*EP <5.1.4> and EP <5.1.8>

### Appearance Inspection



Moderate green to light green and tan colored flowering plant particulates. Thick and dense clusters with round-looking nugs.

Absence of stalks, insects and other extraneous substances by visual inspection on 10 grams of dry flower sample. No evidence of spoilage. No visible foreign matter.

Photograph taken with Canon EOS Rebel T6 in light box at 1/60 sec. f/8 50mm 100 ISO.

Foreign Matter	Method Description	Result (%w/w)
%w/w of Foreign Matter	CN0062 and USP <561>	<2%

N/AP - Not Applicable

*Jing Zhao*

# Pharmascience Inc.

6111 Royalmount Avenue, Montreal, Québec, Canada, H4P 2T4

## Certificate of Analysis



Client:	<u>Ostara Médical</u>	<u>1-Sep-2023</u> Date Received
Sample Name:	<u>GAS CAKE , GCK-001 / E4-GCK001</u>	
Sample ID	<u>CNF-1726-01</u>	<u>1-Sep-2023</u> Analysis Date
Sample Type:	<u>Dried Cannabis</u>	<u>5-Sep-2023</u> Reporting Date
Certificate Number:	<u>2023-02521 Rev 1</u>	

Microbiological Assay	Method (Date of last validation:23-10-2020)	Tolerance Limit*	Units	Result	Pass/Fail
Total Aerobic Microbial Count	USP and EP Harmonized Method CN0027	500,000	CFU/g	<10	Pass
Total Combined Yeast and Moulds Count	USP and EP Harmonized Method CN0027	50,000	CFU/g	<10	Pass
Bile-tolerant Gram Negative Bacteria	USP and EP Harmonized Method CN0027	10,000	CFU/g	<10	Pass

\*EP <5.1.8>

*Jing Zhao*



FRM-009-11  
Effective date: 2023-05-30 / IA

ISO 9001

Quality System Registered

# IRRADIATION Certificate

535 Cartier Ouest  
Laval, Quebec  
HTV 3S8

### Customer Information:

Irradiation Lot Number: 324401  
Date: 2023-09-05

**Ostara Medical Inc.**  
5331 Pierre-Dansereau ave.  
Salaberry-de-Valleyfield, QC.  
J6S 6A2

### Description:

Product: 10 Box(es) of cannabis  
P.O. No: 2023-08-31  
Product lot or reference: Lot: GCK-001, LHK-004, LHK-004E, LHK-006, BZK-011. Total net weight: 55 kg.

Gamma (Cobalt 60) Irradiator used:		IR-147	
Minimum Specified Dose:	5.0 kGy	Delivered Minimum dose:	6.9 kGy
Maximum Specified Dose:	15.0 kGy	Delivered Maximum dose:	9.5 kGy
Starting Date:	2023-09-01 07:12	Completion Date:	2023-09-01 08:15

Note: n/a

Released by:  
(QA department)

*N. Girard*  
**Natalie Girard** Quality Assurance Manager