

**Development and characterisation of
buparvaquone nanosuspensions for
pulmonary delivery in the treatment of
*Pneumocystis pneumonia***

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*To my family
with plenty of love and gratitude*

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INDEX OF CONTENTS

INDEX OF CONTENTS	i
LIST OF FIGURES.....	vii
LIST OF TABLES.....	xii
ABBREVIATIONS	xiv
1. INTRODUCTION, AIMS AND OBJECTIVES.....	1
1.1 Introduction.....	2
1.2 Aims and objectives	4
1.2.1 Formulation development.....	4
1.2.2 <i>In vitro</i> application of buparvaquone formulations	4
1.2.3 Buparvaquone solid dispersions	5
1.2.4 <i>In vivo</i> application of buparvaquone nanosuspensions.....	5
2. LITERATURE REVIEW	7
2.1 The concept of nanocrystals as delivery system of lipophilic drugs	8
2.1.1 Definition and history.....	8
2.1.2 Saturation solubility	9
2.1.3 Reduction in particle size and dissolution velocity	9
2.1.4 Overview of current applications	10
2.1.4.1 Oral delivery.....	10
2.1.4.2 Intravenous delivery.....	10
2.1.4.3 Inhaled delivery.....	11
2.2 Pulmonary anatomy and physiology	11
2.2.1 Anatomy and passage of particles through the airways	11
2.2.1.1 The nose.....	11
2.2.1.2 The nasopharynx	12
2.2.1.3 The larynx.....	12
2.2.1.4 The trachea and the lower airways	12
2.2.2 Physiology.....	13
2.3 General aspects related to pulmonary drug delivery	14
2.3.1 Market perspective.....	15
2.3.2 Mechanisms of aerosol deposition in the lung and the aerodynamic size distribution of inhaled particles.....	16
2.3.2.1 Inertial impaction.....	16

2.3.2.2 Sedimentation (settling)	17
2.3.2.3 Diffusion (Brownian motion).....	17
2.3.2.4 Interception	17
2.3.3 Factors affecting drug deposition	18
2.3.3.1 Properties of the aerosol.....	18
2.3.3.2 Lung morphology	18
2.3.3.3 Breathing pattern	18
2.3.4 Mechanisms of drug absorption in the lung.....	19
2.3.4.1 Transcellular diffusion.....	19
2.3.4.2 Paracelular diffusion.....	19
2.3.4.3 Carrier mediated transport.....	20
2.4 Current formulations and devices for oral inhalation of poorly water soluble drugs	20
2.4.1 Aqueous suspensions for nebulization.....	20
2.4.2 Suspensions for pressurized Metered Dose Inhalers (pMDI's)	21
2.4.3 Powders and solid dispersions for use with Dry Powder Inhalers (DPI's) .	22
2.5 Nebulization	23
2.5.1 Basic principles of atomisation theory	24
2.5.1.1 Generation of particles with ultrasonic nebulization	24
2.5.1.2 Generation of particles with vibrating orifice ultrasonic nebulization ...	25
2.5.1.3 Generation of particles with jet nebulization.....	25
2.5.2 Types of nebulizers	26
2.5.2.1 Jet nebulizers.....	26
2.5.2.2 Ultrasonic nebulizers.....	27
2.5.2.3 Electrical nebulizers	28
2.5.2.4 New "mixed" nebulizers	29
2.5.3 Factors affecting nebulizer performance	29
2.5.3.1 Humidity and temperature of ambient air	29
2.5.3.2 Baffles.....	30
2.5.3.3 Characteristics of the solution	30
2.5.3.4 Solution volume or fill volume	30
2.5.3.5 Operating time	30
2.5.3.6 Air pressure to the jet.....	30
2.5.3.7 Dead volume.....	31

2.5.4 Problems with conventional dispersions during nebulization of lipophilic drugs.....	31
2.6 Pneumocystis pneumonia	32
2.6.1 Aetiology and epidemiology	32
2.6.2 Current drugs used for prophylaxis and therapy	36
3. MATERIALS AND METHODS.....	37
3.1 Materials.....	38
3.1.1 Buparvaquone.....	38
3.1.2 Atovaquone	40
3.1.3 Parvaquone.....	41
3.1.4 Emulsifying agents	42
3.1.4.1 Tyloxapol®	42
3.1.4.2 Poloxamer 188.....	43
3.1.4.3 Polyvinyl alcohol	43
3.1.4.4 Purified soy lecithin	44
3.1.4.5 Sodium glycocholate.....	45
3.1.4.6 Tween® 80	45
3.1.5 Other materials	46
3.1.5.1 Polyvinyl pyrrolidone	46
3.1.5.2 Inulin	46
3.1.5.3 Glycerol.....	47
3.1.5.4 Water	48
3.1.5.5 Nebulizer systems	48
3.2 Methods	50
3.2.1 Production of nanosuspensions with high pressure homogenisation	50
3.2.1.1 Operation principle of a piston-gap type high pressure homogeniser .	50
3.2.1.2 Preparation of Nanosuspensions	51
3.2.2 Characterization of drug nanosuspensions: size distribution, crystal nature and zeta potential.....	52
3.2.2.1 Laser Diffractometry (LD).....	52
3.2.2.2 Photon Correlation Spectroscopy (PCS).....	54
3.2.2.3 Zeta potential and Laser Doppler Anemometry (LDA)	55
3.2.2.4 Polarized light microscopy	56
3.2.2.5 X-Ray Diffraction.....	57

3.2.2.6 Scanning Electron Microscopy (SEM).....	58
3.2.2.7 Viscosity and density	58
3.2.2.8 Surface tension	59
3.2.2.9 In vitro dissolution tests for nanosuspensions.....	59
3.2.2.10 HPLC method to determine the content of buparvaquone	60
3.2.3 Methods used during the <i>in vitro</i> characterisation of aerosol produced during the nebulisation of nanosuspensions	61
3.2.3.1 Cascade Impaction Analysis.....	62
3.2.3.2 Laser diffraction analysis	65
3.2.3.3 Investigation of drug nanocrystals aggregation.....	69
3.2.3.4 Drug output from jet nebulizers.....	70
3.2.4 Methodology employed during the <i>in vivo</i> tests for the inhalation of buparvaquone nanosuspensions by <i>Pneumocystis pneumonia</i> infected mice...	71
3.2.4.1 Laboratory animals	71
3.2.4.2 Development of <i>Pneumocystis pneumonia</i> infection	72
3.2.4.3 Calculation of the dose inhaled and definition of inhalation exposure times	73
3.2.4.4 Test procedure for the drugs administration	74
3.2.4.5 Histological and staining methods for microscopy	74
3.2.4.6 Technique for estimating <i>Pneumocystis</i> burden in the lung.....	75
3.2.4.7 HPLC method to quantify buparvaquone in mice plasma	75
3.2.4.8 HPLC method to quantify buparvaquone in mice organs.....	76
3.2.4.9 Evaluation of drug activity	77
3.2.5 Preparation of buparvaquone solid dispersions	79
3.2.5.1 Spray drying process (SD).....	80
3.2.5.2 Spray-freeze drying process (SFD).....	80
3.2.6 Characterization of buparvaquone solid dispersions.....	81
3.2.6.1 Scanning Electron Microscopy (SEM).....	81
3.2.6.2 Temperature Modulated Differential Scanning Calorimetry (TMDSC)	81
3.2.6.3 X-Ray Powder Diffraction (XRPD)	81
3.2.6.4 Dynamic Vapour Sorption (DVS)	82
3.2.6.6 In vitro dissolution behaviour	82
3.2.6.7 Quantification of PVP during dissolution tests	83

4. RESULTS AND DISCUSSIONS	85
4.1 Nanosuspensions for inhalation. Development and nebulization behaviour	86
4.1.1 Development, follow up stability and dissolution studies of buparvaquone nanosuspensions	86
4.1.1.1 Optimisation of the number of homogenisation cycles.....	86
4.1.1.2 Formulation screening with different dispersion media and follow-up stability.....	88
4.1.1.3 Crystallinity of the nanosuspensions.....	97
4.1.1.4 Saturation solubility of buparvaquone nanocrystals	99
4.1.1.5 <i>In vitro</i> dissolution behaviour of buparvaquone nanocrystals.....	100
4.1.2 Nebulization performance	101
4.1.2.1 Droplet size in aerosols.....	101
4.1.2.2 Analysis of drug nanocrystals	107
4.1.3 Drug output from jet nebulizers	111
4.1.3.1 Theoretical calculation of the nanocrystals load per aerosol droplet..	112
4.1.3.2 The effect of the physicochemical properties of the dispersion media on the droplet size distribution of jet nebulizers	115
4.1.3.3 Drug nanocrystals aggregation with Pari LC Star nebulizer.....	120
4.1.4 Conclusions	121
4.2 Inhalation of buparvaquone nanocrystals in the therapy of <i>pneumocystis</i> pneumonia infected mice	122
4.2.1 Physical and microbiological characterization of the buparvaquone nanosuspension.....	122
4.2.2 Particle size distribution of the atovaquone suspension.....	123
4.2.3 Characterization of the aerosol distribution and nebulizer performance..	124
4.2.4 Drug distribution after specified inhalation exposure times	124
4.2.5 Responses to treatment of <i>Pneumocystis</i> pneumonia among groups	126
4.2.6 Conclusion	135
4.3. Nanocrystals in the solid state for pulmonary delivery	136
4.3.1 Preparation of the solid dispersions	136
4.3.2 Degree of crystallinity and thermodynamical characteristics of the powders	138
4.3.3 Water vapour absorption into solid dispersions/solutions.....	141
4.3.4 Morphology and structure of the powders	144

4.3.4 Dissolution behaviour: Mechanisms of drug release	151
4.3.6 Conclusion	154
5. SUMMARY/ ZUSAMMENFASSUNG	155
5.1 Summary	156
5.2 Zusammenfassung	159
6. REFERENCES	163
6. References	164
7. APPENDICES	185
7.1 APPENDIX A: Size distribution of the nanosuspension formulations measured with LD and PCS techniques during Follow-up stability studies (Mean \pm SD, n=3).	186
7.2 APPENDIX B: LD diameters of aerosol droplets (mean \pm SD; n=5) produced with with jet and ultrasonic nebulization of Formulations A, B and references 1, 2 and 3 (see section 4.1.2.1).....	192
AKNOWLEDGEMENTS	196
CURRICULUM VITAE	198
PUBLICATIONS LIST.....	199

LIST OF FIGURES

	<u>Page</u>
Figure 2-1: Main mechanisms of aerosol deposition in the lung.....	16
Figure 2-2: Example of an enhanced jet nebulizer showing the aerosol flow during inspiration and expiration phases	27
Figure 2-3: Pneumocystis life cycle.....	35
Figure 3-1: Chemical structure of buparvaquone.....	39
Figure 3-2: Chemical structure of atovaquone.....	40
Figure 3-3: Structural formula of parvaquone.....	41
Figure 3-4: Chemical structure of Tyloxapol®	43
Figure 3-5: Molecular formula of Poloxamer 188.....	43
Figure 3-6: Molecular formula of Polyvinyl Alcohol.....	44
Figure 3-7: Chemical structure of phosphatidylcholine.....	45
Figure 3-8: Chemical structure of Tween®80.....	45
Figure 3-9: Chemical structure of Polyvinyl Pyrrolidone.....	46
Figure 3-10: Chemical structure of inulin.....	47
Figure 3-11: Representation of the set-up of a laser diffraction instrument. Adapted from the international standard ISO 13320-1	53
Figure 3-12: (a) External view of the whole body inhalation chamber Glas-Col® Model A4224. (b) Diagram explaining the components and aerosol flow inside of the chamber (Glas-Col® 2000).....	63
Figure 3-13: Photograph of the assembled 8-stage Andersen Cascade Impactor (ACI-8). On the right side, a view of the individual components: separation stages and collection plates.....	64
Figure 3-14: Representation of the set-up of a laser diffraction instrument to measure droplet size of the aerosolized nanosuspensions.....	67
Figure 3-15: Photograph of the laser diffraction apparatus Sympatec Helos BF/Magic®, with a modular inhaler adapter (INHALER®2000).....	69
Figure 3-16: Representative photos of the different infection rates (1 to 4) defined for the evaluation of the lung smears prepared from the 5 groups of treated animals. Diff-Quik® stain, 200× magnification	78
Figure 4-1: LD diameters d50%, d90%, d95% and d99% obtained along a 60 cycles homogenisation process at 1500 bar. Dispersion medium is an aqueous solution of 0.5% poloxamer 188.....	87

Figure 4-2:	Z-Average and polydispersity index (PI) values obtained along a 60 cycles homogenisation process at 1500 bar. Dispersion medium is an aqueous solution of 0.5% poloxamer 188.....	88
Figure 4-3:	Particle size distribution of the drug nanocrystals in formulations A-E measured at the day of production and after 1, 3 and 6 months of storage time at room temperature. Size distribution was measured with PCS (a) and LD (b) techniques.....	90
Figure 4-4a	Z Average particle diameter and polydispersity indices measured with PCS technique. Formulations E, F and G contain 1, 2 and 7 % of drug respectively.....	91
Figure 4-4b	LD particle diameter measured for formulations E, F and G contain 1, 2 and 7 % of drug respectively along 6 months storage time.....	92
Figure 4-5	Particle size distribution of the drug nanocrystals in formulation H measured at the day of production and after 1, 3 and 6 months of storage time at room temperature and under refrigeration. Size distribution was measured with PCS (a) and LD (b) techniques.....	93
Figure 4-6	Particle size distribution of the drug nanocrystals in formulation I-K measured at the day of production and after 1, 3 and 6 months of storage time at room temperature. Size distribution was measured with PCS (a) and LD (b) techniques.....	94
Figure 4-7:	SEM Photographs of buparvaquone original (upper) and nanosuspension after 40 homogenisation cycles (lower). Homogenisation at 1500 bar, room temperature.....	97
Figure 4-8:	X-Ray diffractogram of buparvaquone nanosuspension formulation H after 5(a), and 40 (b) homogenisation cycles. A placebo formulation is shown in (c). Capillary sample holder was used for the measurement of the aqueous dispersion.....	98
Figure 4-9:	Dissolution test of buparvaquone nanocrystals and original powder (LD d50% = $86.5 \pm 9.0 \mu\text{m}$) using 2% Tween 80 solution as a dissolution medium.....	100
Figure 4-10:	Size distribution obtained after nebulizing nanosuspension A using Respi-jet Kendall nebulizer and Pari Turbo Boy nebulizer (top and center) and nanosuspension B using Pari Turbo Boy nebulizer (bottom). All compared vs. the dispersion solution alone.....	104

Figure 4-11:	LD diameters characterizing the size distributions of nanosuspension Form A nebulized with nebulizer Multisonic at the beginning (left), middle (center) and end (right) of the nebulization period, LD diameters d50%, d90%, d95% and d99%.....	105
Figure 4-12:	Characterization LD parameters diameters 50%, 90%, 95%, 99% of size distributions of nebulized suspension A with the nebulizers Respi-jet Kendall (A), Pari Turbo Boy (B), Multisonic (C), Omron U-1 (D). Sizes analysed at the beginning of the nebulization period.....	106
Figure 4-13:	LD size distribution of drug nanosuspension A (left) and nanosuspension B (right) nebulized with nebulizer Pari Turbo Boy. Size distributions analysed at the beginning of the nebulization process.....	107
Figure 4-14:	LD size distribution of the original drug nanosuspension (left) and drug nanosuspension A after the nebulization with the Pari Turbo Boy nebulizer, droplets were collected in the first half of the nebulization time (minute 0 – 2.5).....	108
Figure 4-15:	LD characterization parameters diameters 50%, 90%, 95% and 99% of suspension A in the reservoir of the nebulizer Pari Turbo Boy (left) and the nebulizer Omron U1 (right) at the end of the nebulization process compared to nanosuspension before nebulization.....	109
Figure 4-16:	PCS diameters and polydispersity indexes of the drug nanosuspension B before and after its nebulization by Respi-jet Kendall nebulizer (A), Pari Turbo Boy nebulizer (B), Multisonic nebulizer (C) and Omron U-1 nebulizer (D).....	110
Figure 4-17:	PCS diameters and polydispersity indexes (PI) of nanosuspension A as a function of nebulization time (1 min, 2,5 min, 5 min), Pari Turbo Boy nebulizer (left) and Multisonic nebulizer (right).....	111
Figure 4-18:	Graphic representation of the distribution of microcrystals (left) and of nanocrystals (right) in aerosol droplets.....	112
Figure 4-19:	Percentages of drug emitted obtained with different nanosuspension formulations using a Pari LC Star nebulizer. (a) Represents the influence of viscosity and (b) the influence of the surface tension values on the quantity of drug emitted.....	119
Figure 4-20:	Influence of the nebulization process on particle size diameter using Pari LC Star and formulations C-D. PCS and LD particle diameter are shown at the beginning (1), at the end (3) of the nebulization and the diameter of particles detected in the aerosol collected (2).....	120

Figure 4-21:	Distribution of aerosolized buparvaquone in different mouse tissues. One mouse per exposure time. A second experiment following identical procedures gave essentially the same results (data not shown). Plasma values in μg drug per ml plasma.....	125
Figure 4-22:	<i>Pneumocystis</i> burden as microscopically determined in lung homogenate preparations using the bisBenzimide stain.....	127
Figure 4-23:	<i>Pneumocystis</i> infection score as microscopically determined (magnification 200x) in lung impression smears stained with BB (a) and DQ (b).....	129
Figure 4-24a:	Comparison between trophozoite clusters in lung impression smears stained with DQ. Infected animals were left untreated (upper) or were treated with BPQ per os (lower). Magnification 400x. Pictures show trophozoite clusters of the parasite (TC), erythrocytes (E) and host cells (C).....	131
Figure 4-24b:	Comparison between trophozoite clusters in lung impression smears stained with BB. Infected animals were left untreated (upper) or were treated with BPQ per os (lower). Magnification 400x. Pictures show trophozoite clusters of the parasite (TC), erythrocytes (E) host cells (C) and intact trophozoites.....	132
Figure 4-25:	Details of lung morphology typically observed in <i>P. murina</i> -infected RAG mice after 3 weeks of therapy.....	134
Figure 4-26:	Crystallinity and grade of miscibility investigations for PVP solid dispersions/solutions prepared with BPQ.....	139
Figure 4-27:	XRPD studies of BPQ incorporated into inulin solid dispersions.....	141
Figure 4-28:	Dynamic vapour sorption (DVS) studies of the BPQ powders prepared with carrier PVP (a) and inulin (b).....	143
Figure 4-29a:	SEM picture of the buparvaquone powder particles in the sample I-A-SFD. A mixture of TBA drug solution and aqueous inulin solution was spray-freeze dried. Hollow particles were formed with small nanocrystals incorporated between the sugar net (arrow). Magnification 7500 x.....	144
Figure 4-29b:	SEM picture of the buparvaquone powder particles in the sample I-B-SFD. A half diluted mixture of TBA drug solution and aqueous inulin solution was spray-freeze dried. Hollow particles were formed with small nanocrystals incorporated between the sugar net (arrow). Magnification 7500 x.....	145
Figure 4-29c:	SEM picture of the buparvaquone powder particles in the sample PVP-A-SFD. A mixture of TBA drug solution and TBA solution of PVP was spray-freeze dried. Sponge-like particles were formed. Magnification 7500 x.....	146

Figure 4-29d:	SEM picture of the buparvaquone powder particles in the sample PVP-B-SFD. A mixture of TBA drug solution and aqueous solution of PVP was spray-freeze dried. Highly porous particles were formed. Magnification 7500 X.....	147
Figure 4-29e:	SEM picture of the buparvaquone powder particles in the sample I-NC-SFD. A mixture of BPQ nanosuspension and aqueous solution of inulin was spray-freeze dried. Aggregates of undefined structure were formed. Drug nanocrystals can be distinguished (arrow). Magnification 7500 X.....	148
Figure 4-29f:	SEM picture of the buparvaquone powder particles in the sample I-NC-SFD. A mixture of BPQ nanosuspension and aqueous solution of inulin was spray-freeze dried. Aggregates of undefined structure were formed. Drug nanocrystals can be distinguished (arrow). Magnification 7500 X.....	149
Figure 4-29g:	SEM picture of the buparvaquone powder particles in the sample I-NC-SD. A mixture of BPQ nanosuspension and aqueous solution of inulin was spray dried. Rounded particles were formed. Magnification 7500 x.....	150
Figure 4-29h:	SEM picture of the buparvaquone powder particles in the sample PVP-NC-SD. A mixture of BPQ nanosuspension and aqueous solution of PVP was spray dried. Shrinkage particles were formed. Magnification 7500 x.....	150
Figure 4-30:	BPQ release curves of the PVP powders prepared.....	151
Figure 4-31:	BPQ release curves of the inulin powders prepared.....	153

LIST OF TABLES

	<u>Page</u>
Table 2-1: pMDI's marketed products based in dispersion formulations.....	21
Table 2-2: Examples of DPI's currently in the market and their mechanism of action.....	23
Table 3-1: Nebulization systems used to test nanosuspensions.....	49
Table 4-1: Formulation composition of the nanosuspensions prepared for pulmonary administration.....	89
Table 4-2: Zeta potential values for the buparvaquone nanosuspensions selected due to their good stability. Measurements were performed in adjusted 50 μ S/cm Milli-Q water and pH 6.0-7.0.....	95
Table 4-3: Drug content of physically stable nanosuspension formulations at the day of production and after 6 months of storage. Measurements performed with HPLC method. Values represent the mean \pm SD of 3 measurements.....	96
Table 4-4: Saturation solubility values for the buparvaquone nanosuspensions selected. Measurements were performed using HPLC method PCS particle diameters of the drug nanocrystals are also summarized.....	99
Table 4-5: Composition of buparvaquone nanosuspension A and B used for nebulization study.....	101
Table 4-6: Particle size characterization (mean \pm SD, n=3) of buparvaquone nanosuspension A and B used for nebulization study.....	102
Table 4-7: Theoretical calculations to determine the maximum BPQ nanocrystals (400 nm) load in 2.8 μ m aqueous droplets. The maximum of microcrystals (2 μ m) load in the same size droplets are calculated for comparison.....	113
Table 4-8: Theoretical calculations to determine the nanocrystals load in aerosol droplets produced with a 5% nanosuspension.....	114
Table 4-9: Composition of buparvaquone nanosuspensions used with Pari LC Star jet nebulizer.....	116
Table 4-10: Aerosolization characteristics of different nanosuspension formulations following nebulization with Pari LC Star nebulizer. A fill volume of 5 mL was used in all the cases.....	117
Table 4-11: Particle size distribution of Wellvone [®] as supplied and after dilution. Measurements were performed with a laser diffractometer.....	123

Table 4-12:	Summary of the composition and manufacture processes used in the preparation of the solid dispersions.....	136
Table 4-13:	Particle diameter values measured with PCS and LD. Aqueous dispersion of drug nanocrystals were stabilized adding 0.5 % poloxamer 188.....	137

ABBREVIATIONS

SXT	Trimethoprim and Sulfamethoxazole
ATQ	Atovaquone
BPQ	Buparvaquone
PcP	<i>Pneumocystis pneumonia</i>
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome
DPI	Dry Powder Inhaler
pMDI	Pressurized metered dose inhaler
HLB	Hydrophilic-lipophilic balance
PVA	Polyvinyl alcohol
PVP	Polyvinyl pyrrolidone
DPPC	Dipalmitoylphosphatidylcholine
FDA	Food and Drug Administration Office (US Government)
GRAS	Generally Recognized As Safe
LD	Laser Diffractometry
PCS	Photon Correlation Spectroscopy
PI	Polydispersity Index
LDA	Laser Doppler Anemometry
NaCl	Sodium chloride
XRPD	X-Ray powder diffraction
SEM	Scanning Electron Microscope
MMAD	Mass Median Aerodynamic Diameter
GSD	Geometric Standard Deviation
MMD	Mass Median Diameter
ACI	Andersen Cascade Impactor
VMD	Volume Median Diameter
DQ	Diff-Quik [®] stain
BB	Bis-benzimide stain
H&E	Hematoxylin and eosin stain
HBSS	Hank's balanced salt solution
HPLC	High pressure liquid chromatography

OIF	Oil immersion field
SFD	Spray-freeze drying process
SD	Spray drying process
TMDSC	Temperature Modulated Differential Scanning Calorimetry
DVS	Dynamic vapour sorption
T _g '	Transition glass temperature
NS	Nanosuspension
TBA	Ter-butyl alcohol

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