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# List of Abbreviations

$\mu\text{g}$	=	Microgram
$\mu\text{l}$	=	Microlitre
$\mu\text{M}$	=	Micromolar
$\mu\text{m}$	=	Micrometer
$^{\circ}\text{C}$	=	Degree celcius
3-D	=	Three dimensional
ALP	=	Alkaline phosphatase
AP	=	Apheresis platelets
BCPB	=	Buffy coat-derived platelets
bFGF	=	Basic fibroblast growth factor
BM	=	Bone marrow
BMP	=	Bone morphogenetic protein
bp	=	Base pair
BPBM	=	Bovine porous bone mineral
BSP	=	Bone sialoprotein
$\text{Ca}^{2+}$	=	Calcium ion
Cat.No.	=	Catalog number
c-DNA	=	Cloned-deoxyribonucleic acid
CFU-F	=	Colony forming unit-fibroblast
cm	=	Centimeter
$\text{cm}^2$	=	Square centimeter
$\text{CO}_2$	=	Carbondioxide
Col I	=	Type I collagen
cont	=	Control
d	=	Culture-day
DBM	=	Demineralized bone matrix
DCFD-AS	=	Denatured atelocollagen sponge
dex	=	Dexamethasone
DFDBA	=	Demineralized freeze-dried bone allograft
DNA	=	Deoxyribonucleic acid
DOPC	=	Determine osteoprogenitor cells
DPBS	=	Phosphate buffer saline
ECM	=	Extracellular matrix
EDTA	=	Ethylenediaminetetra-acetic acid
EGF	=	Epidermal growth factor
e-PTFE	=	Expanded-polytetrafluoroethylene membrane
FBS	=	Fetal bovine serum
FDBA	=	Freeze- dried bone allograft
G	=	Gauge
g	=	Gram
g	=	Gravitational force
GBR	=	Guide bone tissue regeneration
GC content	=	Gaunine and cytocine content

## List of Abbreviations (Continue)

GDPH	=	Gaunine dinosine triphosphate
GTR	=	Guid tissue regeneration
GuHCL	=	Gaunidine hydrochloric acid
H <sub>2</sub> O <sub>2</sub>	=	Hydrogen peroxide
HA	=	Hydroxyapatite
HCL	=	Hydrochloric acid
hMSCs	=	Human mesenchymal stem cells
hOB	=	Human trabecular bone osteoblast
ICBM	=	Inert cancellous bovine bone matrix
IGF	=	Insulin-like growth factor
IGFBP	=	Insulin-like growth factor binding protein
IL	=	Interleukin
IOPC	=	Inducible osteoprogenitor cells
kDa	=	Kilodalton
kg	=	Kilogram
kV	=	Kilovolt
L	=	Liter
Ladder	=	Base pair ladder
M	=	Molar
mg	=	Milligram
min	=	Minute
ml	=	Milliliter
mm	=	Millimeter
mM	=	Millimolar
mRNA	=	Massenger ribonucleic acid
NAD <sup>+</sup>	=	Reduced-Nicotinamide adenine dinucleotide
NADH	=	Nicotinamide adenine dinucleotide
NIH	=	National institute of health
nm	=	nanometer
OC	=	Osteocalcin
P0	=	Primary passage
P1	=	First passage
PEG	=	Polyethylene glycol
PGA	=	Polyglycolic acid
Pi	=	Phosphate ion
PDGF	=	Platelet-derived growth factors
PLGA	=	DL-lactide-co-glycolic acid
PPP	=	Platelet poor plasma
PRP	=	Platelet-rich plasma
PTH	=	Parathyroid hormone
PTHrP	=	Parathyroid hormone related protein
RBC	=	Red blood cell



## List of Abbreviations (Continue)

RF Nr	=	Reference number
rhBMP	=	Recombinant human bone morphogenetic protein
rhOP-I	=	Recombinant human osteogenic protein-I
rhPDGF	=	Recombinant human platelet-derived growth factor
rpm	=	Round per minute
RT	=	Room temperature
RT-PCR	=	Reverse transcriptase polymerase chain reaction
SPHA	=	Sintered porous hydroxyapatite
TCP	=	Tricalcium phosphate
TGF- $\beta$	=	Transforming growth factors - beta
TP	=	Tube method
U	=	unit
v/v	=	Volume / volume
VD3	=	1 $\alpha$ , 25 dihydroxy cholecalciferol
VEGF	=	Vascular endothelial growth factor
VEGF	=	Vascular endothelium growth factor
w/v	=	Weight per volume
WBC	=	White blood cell