101 Clinical Cases & Results in Treatment of Varicose Ulcer

CIRCULAT®
The solution for circulatory problems.
Scientific Rationale

Surrogate laboratory endpoints of dysglycemia have been the targets for ‘treatment’ of diabetes mellitus (DM) for almost a century, and there have been many pharmaceutical agents developed to reduce FBG and HbA1c. But the development of agents targeting the underlying pathologies of micro- and macro-vascular complications in these patients has had considerably less success. Unfortunately, many clinical trials have failed to show healing of diabetic foot ulcers (DFU) often leading to amputation, or to reverse ischemic defects of the myocardium often heralding myocardial ischemia (MI) in many patients with diabetes.

Careful protection of feet with stimulation of fibroblasts and/or major improvements in lifestyle (diet/exercise) with reduced platelet aggregation have not met the challenges of DFU and MI. Healing of ischemic tissues in the lower extremities or the myocardium is multifactorial, biologically complex and clinically challenging.

The four groups of pathologies and responses which are addressed by CIRCULAT™ may be referred as follows:

A. Vascular - Tone and Flow. Botanical actives in CIRCULAT® dilate arterioles directly through stimulating NO/eNOS and by inhibition of ACE, and indirectly by increasing the angiogenic responses of microcirculation. Flow is further improved by reduction in blood viscosity due both to reduction of platelet aggregation and to lowering of plasma lipids.

B. Immune - Responsiveness. CIRCULAT® induces appropriate responses in several immune functions: 1. The clinical benefit of anti-inflammatory agents is generally established; hsCRP is a known marker of cardiovascular disease, including in diabetes mellitus; 2. Further studies have shown that reduction in cytokines/interleukins such as IL-2 and IL-6, and in mitogen-stimulated endothelial responses lessen vascular pathologies; 3. Anti-inflammatory effects are balanced with immune-modulation (e.g., NF-kappa B) for the best ongoing tissue protection against microbial colonization and to stimulate proliferative responses.

C. Metabolic – Energy and Enzymes, Diabetes and Lipids. Certain botanicals increase oxidative capabilities, especially in a microenvironment not poisoned by hyperglycemia. Responses to CIRCULAT™ have been measured in ATP synthesis, in protein phosphorylations, in dehydrogenases, and in tricarboxylic acid cycle activity. Some components also improve basic glucose metabolism in the diabetic, improving insulin sensitivity and glucose uptake. Lowering of plasma lipids may be a primary or a secondary effect of CIRCULAT™.

D. Healing – Stimuli and Care. Multiple biological responses are necessary for covering an ulcer. While the supply of oxygen in good capillary flow is sine qua non, a healthy tissue environment includes the right redox levels, stimulation of fibroblasts, normalized glucose metabolism and the right tissue responses of ‘scarring’ and remodeling. And the complex response can be unsuccessful if the ulcer is not protected, as known in clinical care.
Results of treatment of Varicose Ulcer with CIRCULAT®

101 examples with photographic evidence of clinic study cases

The images shown are not retouched pictures from DFU in real people and may be strong for viewers.
Case Study 1

Female patient, 31 years old

- 11 months of evolution -

After 2 month treatment
Case Study 2
Female patient, 62 years old
- Years of evolution -

After 4 month treatment
Case Study 3
Male patient, 80 years old
- 7 years of evolution -

After 3 month treatment
- Amputation avoided -
Case Study 4
Female patient, 65 years old
- 23 months of evolution -

After 8 month treatment
Case Study 5
Male patient, 72 years old
- 1 month of evolution -

After 4 month treatment
Case Study 6
Female patient, 65 years old
- 4 years of evolution -

After 1 week treatment
Case Study 7
Male patient, 69 years old
- 20 years of evolution -

After 3 month treatment
Case Study 8
Female patient, 74 years old
- 3 years of evolution -

After 2 month treatment
Case Study 9
Male patient, 62 years old
- 13 years of evolution -

After 2 month treatment

After 5 month treatment
Case Study 10

Male patient, 68 years old

- 15 years of evolution -

After 3 month treatment
Case Study 11

Female patient, 59 years old

- 3 months of evolution -

After 5 month treatment
Case Study 12
Female patient, 85 years old
- 3 months of evolution -

After 2 month treatment
Case Study 13
Female patient, 52 years old
- 6 months of evolution -

After 2 month treatment
Case Study 14
Male patient, 63 years old
- 1 year of evolution -

After 5 month treatment
Case Study 15

Female patient, 47 years old

- 1 month of evolution -

After 2 month treatment
Case Study 16
Female patient
- 8 months of evolution -

After 2 month treatment
Case Study 17
Female patient, 70 years old
- 5 years of evolution -

After 6 month treatment
Case Study 18
Female patient, 39 years old
- 4 years of evolution -

After 3 month treatment
Case Study 19
Female patient, 53 years old
- 6 Months of evolution -

After 4 month treatment
Case Study 20
Female patient, 74 years old
- 4 years of evolution -

After 9 month treatment
Case Study 21
Female patient, 61 years old
- 2 months of evolution -

After 2 month treatment
Case Study 22
Female patient, 73 years old
- 20 years of evolution -

After 2 month treatment
Case Study 23
Female patient, 61 years old
- 2 months of evolution -

After 2 month treatment
Case Study 24
Female patient, 73 years old
- 20 years of evolution -

After 2 month treatment
Case Study 25
Female patient, 66 years old

- 2 Years of evolution -

After 8 month treatment
Case Study 26
Male patient, 53 years old
- 4 years of evolution -

After 2 month treatment
Case Study 27
Female patient, 47 years old
- 2 months of evolution -

After 2½ month treatment
Case Study 28
Male patient, 68 years old
- 3 years of evolution -

After 4½ month treatment
Case Study 29
Female patient, 87 years old
- 6 months of evolution -

After 3½ month treatment
Case Study 30

Female patient, 65 years old

- 3 months of evolution -

After 3 month treatment
Case Study 31
Female patient, 37 years old
- 16 years of evolution -

After 36 day treatment
Case Study 32
Female patient, 71 years old
- 7 years of evolution -

After 2 month treatment
Case Study 33
Male patient, 64 years old
- 7 months of evolution -

After 7 day treatment
Case Study 34
Female patient, 55 years old
- 1 month of evolution -

After 3 month treatment
Case Study 35
Female patient, 74 years old
- 4 years of evolution -

After 2 month treatment
Case Study 36
Male patient, 62 years old
- 10 months of evolution -

After 2 month treatment
Case Study 37

Female patient, 70 years old

- 4 months of evolution -

After 1½ month treatment
Case Study 38
Female patient, 73 years old
- 30 days of evolution -

After 45 day treatment
Case Study 39
Female patient, 65 years old
- 7 years of evolution -

After 5 month treatment
Case Study 40
Female patient, 65 years old
- 20 years of evolution -

After 2 month treatment
Case Study 41
Female patient, 66 years old
- 2 Years of evolution -

After 7 day treatment
Case Study 42
Female patient, 55 years old
- 4 years of evolution -

After 3 month treatment
Case Study 43
Female patient, 45 years old

- 3 years of evolution -

After 3 month treatment
Case Study 44
Female patient, 78 years old
- 3 years of evolution -

After 4 month treatment
Case Study 45
Female patient, 70 years old
- Years of evolution -

After 15 day treatment

After 15 day treatment
Case Study 46
Male patient, 83 years old
- 2 months of evolution -

After 1 month treatment

After 2 month treatment
Case Study 47
Female patient, 80 years old
- 2 months of evolution -

After 15 day treatment
Case Study 48
Female patient, 60 years old
- 3 years of evolution -

After 4 month treatment
Case Study 49
Female patient, 53 years old
- 3 years of evolution -

After 4 month treatment
Case Study 50
Female patient, 76 years old

- 4 months of evolution -

After 4 month treatment
Case Study 51
Female patient, 75 years old
- 5 years of evolution -

After 4 month treatment
Case Study 52
Female patient, 65 years old
- 3 years of evolution -

After 4 month treatment
Case Study 53
Female patient, 70 years old
- 1 year of evolution -

After 3 month treatment
Case Study 54
Female patient, 69 years old
- 1 year of evolution -

After 1 month treatment
After 2 month treatment
Case Study 55
Female patient, 69 years old

- 5 Years of evolution -

After 1 month treatment
Case Study 56
Female patient, 54 years old
- 4 years of evolution -

After 4 month treatment
Case Study 57
Female patient, 74 years old
- 4 years of evolution -

After 9 month treatment
Case Study 58
Female patient, 52 years old
- 4 years of evolution -

After 3 month treatment

After 6 month treatment
Case Study 59
Female patient, 52 years old
- 10 years of evolution -

After 2 month treatment
Case Study 60
Female patient, 64 years old
- 1 year of evolution -

After 1 month treatment
Case Study 61
Male patient, 54 years old
- 18 months of evolution -

After 2 month treatment
Case Study 62

Female patient, 66 years old

- 5 years of evolution -

After 1 year treatment
Case Study 63
Female patient, 46 years old
- 10 years of evolution -

After 1 month treatment
Case Study 64
Female patient, 73 years old
- 2 years of evolution -

After 1 month treatment
Case Study 65
Female patient, 57 years old
- 5 years of evolution -

After 6 month treatment
Case Study 66
Female patient, 40 years old
- 2 years of evolution -

After 45 day treatment
Case Study 67

Female patient, 76 years old

- 3 months of evolution -

After 45 day treatment
Case Study 68
Female patient, 66 years old
- 6 years of evolution -

After 45 day treatment
Case Study 69
Female patient, 64 years old
- 3 years of evolution -

After 5 month treatment

After 10 month treatment
Case Study 70

Male patient, 45 years old

- 3 years of evolution -

After 4 month treatment
Case Study 71
Female patient
- 3 years of evolution -

After 4 month treatment
Case Study 72
Female patient, 32 years old
- 3 years of evolution -

After 15 day treatment
Case Study 73
Female patient, 74 years old
- 7 months of evolution -

After 5 month treatment
Case Study 74
Female patient, 59 years old
- 3 months of evolution -

After 1 month treatment
Case Study 75
Female patient, 56 years old
- 3 months of evolution -

After 15 day treatment
Case Study 76
Female patient, 79 years old
- 7 years of evolution -

After 45 day treatment
Case Study 77
Female patient, 61 years old
- 2 years of evolution -

After 2 month treatment
Case Study 78
Male patient, 68 years old
- 10 years of evolution -

After 2 month treatment
Case Study 79
Female patient, 71 years old
- 2 months of evolution -

After 15 day treatment
Case Study 80
Female patient, 54 years old
- 10 months of evolution -

After 2 month treatment
Case Study 81
Female patient, 76 years old
- 3 years of evolution -

After 2 month treatment
Case Study 82
Female patient, 64 years old
- 10 years of evolution -

After 2½ month treatment
Case Study 83

Female patient, 37 years old

- 4 months of evolution -

After 15 day treatment
Case Study 84
Male patient, 50 years old
- 4 months of evolution -

After 15 day treatment

After 1 month treatment
Case Study 85
Female patient, 62 years old
- 10 years of evolution -

After 40 day treatment
Case Study 86
Female patient, 51 years old
- 4 years of evolution -

After 1 month treatment
Case Study 87
Female patient, 59 years old
- 4 years of evolution -

After 3 month treatment
Case Study 88

Male patient

- 9 months of evolution -

After 1 month treatment
Case Study 89
Female patient, 74 years old
- 5 months of evolution -

After 4 month treatment
Case Study 90
Female patient, 38 years old
- 3 months of evolution -

After 3 month treatment
Case Study 91
Female patient, 65 years old
- 16 years of evolution -

After 2 month treatment
Case Study 92
Female patient, 57 years old
- 15 years of evolution -

After 45 day treatment
Case Study 93
Male patient, 64 years old
- 2 months of evolution -

After 15 day treatment
Case Study 94

Female patient, 57 years old

- 10 years of evolution -

After 1 month treatment
Case Study 95
Male patient, 70 years old
- 8 years of evolution -

After 2 month treatment
Case Study 96
Female patient, 76 years old
- 4 months of evolution -

After 15 day treatment
Case Study 97

Male patient, 70 years old

- 2 years of evolution -

After 3 month treatment
Case Study 98
Female patient, 73 years old
- 4 years of evolution -

After 2 month treatment
Case Study 99
Female patient, 66 years old
- 4 weeks of evolution -

After 1 month treatment
Case Study 100
Female patient, 80 years old
- 8 months of evolution -

After 3 month treatment
Case Study 101
Female patient, 73 years old
- 7 months of evolution -

After 3 month treatment
For additional information about clinical trials and CIRCULAT®, please contact us at

CIRCULAT BIOTECH, LLC
2180 Calumet St.
Clearwater, Florida 33735
Dr. José Angel Olaide Rangel, CEO & Founder
Phone: +727-214-1290 / +58-212-945-9925
jose.olalde@circulat.com