



WHAT'S NEW AT

**dv**

biologics®

November 2010

CELLutions  
for Innovation™

newsletter

# Glioblastoma Multiforme

Glioblastoma multiforme (GM) is the most common and aggressive type of tumor of the brain which involves glial cells. Although it represents approximately 52% of all parenchymal and 20% of all intracranial brain tumors, GM only occurs in 2–3 individuals per 100,000 people in Europe and North America<sup>1</sup>. The hallmark of GM are the presence of small areas of necrotic tissue surrounded by anaplastic cells and hyperplastic blood vessels which differentiates the tumor from a Grade 3 astrocytoma<sup>2</sup>.

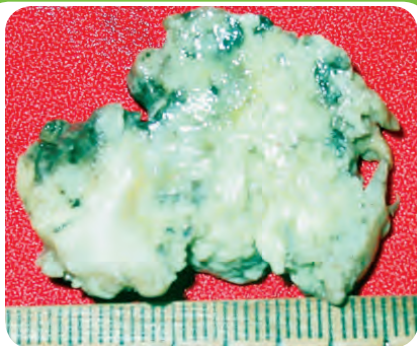
DV Biologics now offers GM primary cells (aN010-f-GM) and formalin fixed paraffin embedded blocks (aN010-ps-GM) for your research needs. Interest in the field of GM has grown immensely because most patients die within one year. The use of DV Biologics GM primary cells and/or tissue blocks can enable your knowledge of disease mechanisms. Most importantly it will allow

investigating GM at the molecular, cellular, and tissue levels. These observations may lead to the discovery of new therapeutic targets.

DV Biologics GM tissue and cells come with a patient clinical diagnostic report as illustrated in figure 1. Specific information or custom cell/tissue procurement from GM tissue may be available depending upon your needs.

**Let us know how we can facilitate your research needs!**

1. Ohgaki, H; Kleihues, P (2005). Population-based studies on incidence, survival rates, and genetic alterations in astrocytic and oligodendroglial gliomas. *Journal of neuropathology and experimental neurology* 64 (6): 479–89.
2. Lipsitz, D.et al. (2003). Glioblastoma Multiforme: Clinical Findings, Magnetic Resonance Imaging, and Pathology in Five Dogs. *Veterinary Pathology* 40 (6): 659–69.



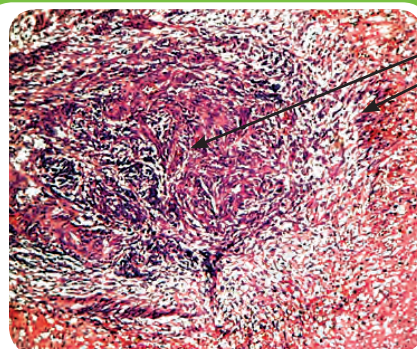
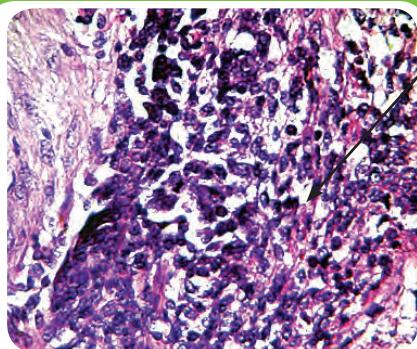
## DEEP PARIETO-OCCIPITAL REGION

### Macroscopic Analysis

Oval tissue biopsy measuring 3.6 x 2.5 x 1.5 cm, area of sectioning grayish white, central region creamy yellowish and soft. Sample was processed further for histological analysis.

### Microscopic Analysis

Histological sections demonstrate glial cell neoplasm, dense cellular proliferation, signs of anaplasia as evidenced by macronucleosis, hyperchromatism, pleomorphism, and mitotic activity. Distortion of cell polarity in relation to the nucleus and cytoplasm. Proliferation of endothelial vessels, extensive area of necrosis surrounded by neoplastic cells.



**Diagnostic**  
Glioblastoma Multiforme



## Ways To Place An Order

Orders may be placed by phone, fax, email or through the online ordering system. Please visit the website to download DV Biologics PDF Order Form to place an order via fax or use the form below.

### Shipping & Delivery

**US.** All North American orders are shipped from DV Biologics headquarters in Southern California and freight is pre-paid and added to your invoice as a separate item. Orders are shipped within 1 or 2 working days, depending upon the availability of the item. Shipments are sent every Monday to Thursday via overnight courier service for delivery on the next business day.

**International.** International orders are shipped from DV Biologics headquarters in Southern California every Monday unless specially requested to be shipped on another date.

### Conditions

Products are sold for laboratory research use only and are not to be used in humans for any purpose. As a condition of purchase, the purchaser shall not make products available for the purpose of further resale or alter the product label and the DV Biologics mark of origin without the express written permission of DV Biologics LLC.

### Contact Us:

**By phone** 1.888.773.5959 (Toll Free North America)

**By fax** 1.877.773.5959 (Toll Free North America)

**By email** [orders@dvbiologics.com](mailto:orders@dvbiologics.com)

### Ordering Hours:

Monday through Friday, 9:00 am - 5:00 pm Pacific Standard Time.

Order anytime, 24 hours a day, 365 days a year by email or fax. If your order arrives outside our normal business hours, it will be quickly processed at the beginning of the next business day.



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