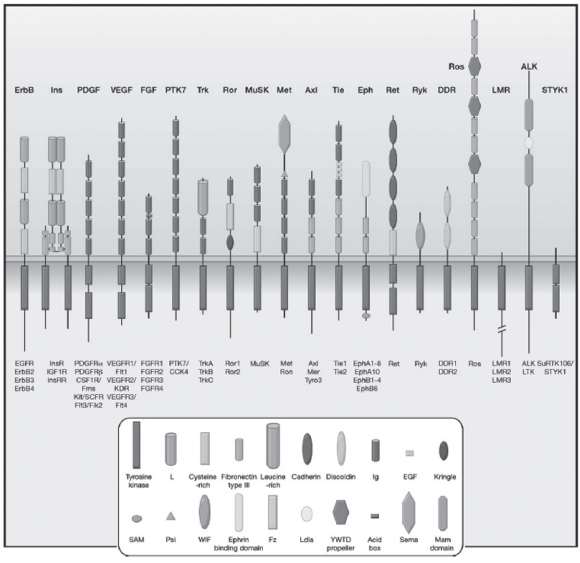
Bölüm
1

HEDEFLENMİŞ TEDAVİLER (TİROZİN KİNAZ İNHİBİTÖRLERİ)

Lokman KORAL[1]

Kanser biyolojisinde yer alan moleküler ve hücresel süreçlerin anlaşılmasında son yıllarda önemli ilerlemeler kaydedilmiştir. Kanser gelişimi ve ilerlemesinde rol oynayan bu moleküler hedeflerin belirlenmesi, şu anda klinik uygulamada halen kullanılmakta veya araştırılmakta olan yeni moleküler hedefli ajanların geliş-mesine yol açmıştır. Bu bölümde antineoplastik tedavide kullanılan protein tirozin kinazlar, protein kinaz inhibitörlerinin etki mekanizmaları ile ilgili bilgilerin verilmesi amaçlanmıştır.



Şekil 1. Reseptör tirozin kinaz ailesi. Mark A. Lemmon and Joseph Schlessinger. Cell Signaling by Receptor Tyrosine Kinases. Cell 141, 1117-1134. DOI 10.1016/j.cell.2010.06.011.

[1] Dr. Öğr. Üyesi Lokman KORAL Çanakkale Onsekiz Mart Üniversitesi Tıbbi Onkoloji Bilim Dalı lokmankoral@hotmail.com

Tablo 1: (Devamı)		
Molekül	**İnhibe ettiği kinaz / kinazlar**	**Hastalıklar**
Lapatinib[51]	EGFR/ErbB1 ve ErbB2	Meme
Larotrectinib[52]	TRKA, TRKB, TRKC	NTRK pozitif solid organ tümörleri
Lorlatinib[53]	ALK, ROS1	KHDAK
Osimertinib[54]	EGFR	KHDAK
Pazopanib[55,56]	VEGFR-1, VEGFR-2, VEGFR-3, PDGFRα ve PDGFRβ, FGFR-1, cKİT	RCC, Sarkom
Regorafenib[57,58,59]	VEGFR-1, VEGFR-2, VEGFR-3, PDGFRα ve PDGFRβ, RET, FGFR-1, FGFR-2, cKİT, TIE2, DDR2, TrkA, Eph2A, FAF-1, BRAF, PTK5	Kolorektal, GİST, HCC
Sorafenib[60,61]	VEGFR-1, VEGFR-2, VEGFR-3, PDGFRβ, cKİT, FLT-3, RET, CRAF, BRAF	HCC, RCC
Sunitinib[62,63,64]	VEGFR-1, VEGFR-2, VEGFR-3, PDGFRα ve PDGFRβ, FLT3, CSF1R, RET	GİST, RCC, pankreas nöroendokrin tümör
Temsirolimus[65]	mTOR	RCC
Trametinib[66]	MEK1 ve MEK2, BRAF	Malign melanom
Vandetanib[67]	EGFR, VEGF, RET, BRK, TIE2, EPH, SRC	Tiroid
Vemurafenib[68]	BRAF	Malign melanom

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